COLLECTOR'S EDITION

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FEEL SMART AGAIN

THE mental_floss

500

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MOST IMPORTANT PEOPLE *in* HISTORY*

**ACCORDING TO US*

INCLUDING

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DECEMBER 2015
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+ HOW TO OPEN CHAMPAGNE WITH A SWORD, WIN A DOG FRISBEE CHAMPIONSHIP, AND, UM, LIVE FOREVER! P.20

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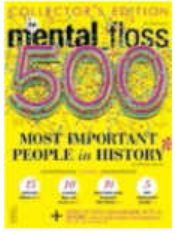

Cover by Stephan Walter

ALAMY (CHEWBACCA, INDIANA JONES, TIGGER). ISTOCK (SPORK, CAT, BABOON)

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ILLUSTRATION BY BYRON EGGENSCHWILER (DOGS). ILLUSTRATION BY BRANDON LOVING (KHUTULUN). ALAMY (BATISTE). ISTOCK (CHICKEN NUGGET, DIAMOND, GUINEA PIG, POPE FRANCIS). EVERETT COLLECTION (SPIDER-MAN)

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THE ALL-NEW TACOMA

A SWEET SAGA

It started, as many great things in history undoubtedly have, with waffles. The *mental_floss* team was brainstorming over breakfast when someone tossed out the idea of the "Floss 500." It was a magazine geek joke: a nod to the annual *Fortune* issue that ranks huge companies. We laughed. Then we stopped laughing. It was actually a *great* idea. After all, we love a good list. Why not compile the ultimate directory of the people who have shaped the weird and fascinating world that we aim to celebrate in each issue?

As it turns out, there is a good answer to that question. It's an epically ambitious task to comb several thousand years of civilization for stories about people doing things that were not just important but *interesting*. I'm not much on endurance, personally—I have never run a marathon, written a novel that has an ending (or a middle), or been granted a patent. And it was clear early on that this wasn't an ordinary issue: It was a *mental_floss* Mount Everest.

But the thing about climbing mountains, or so we're told, is that there's no more valid reason to do it than "because it's there." And once something is in motion, we know there's a pretty good chance it'll stay in motion[1]. We forged on.

What we produced is quite unlike any list you've read before. (It begins on page 26.) We sought out not just the most interesting and important adventurers, innovators, thinkers, and tinkerers who ever lived, but in particular, those who've gone underappreciated elsewhere. (Or those whose most delightful achievement is overshadowed by their more "significant" ones—did you know we have Queen Elizabeth I to thank for gingerbread men?)

We're not vouching for everything everyone on our list has ever done—Kim Jong-il found his way on it (page 35); so did the guy who invented email spam (page 54) and at least one psychopath (page 54). But we're confident that, for better or worse, each has made a notable contribution to shaping the strange and wonderful world we live in. Hopefully, we just did too.

jessanne

@jessanne

P.S. Did we leave anybody out? (Spoiler: We definitely did.) Let us know at letters@mentalfloss.com or @mental_floss #Floss500.

[1] Thanks to Isaac Newton, but not to his mischievous dog, Diamond (see page 49).

ISTOCK

mental_floss

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In researching Pacific High for "1 Crazy Curriculum" (page 14), **SALLY GAO** found more than a few photos of "joyfully nude" students. And in writing our piece on creatures of the sea (page 12), she discovered a horror: "The image of the frilled shark will haunt me forever." The Columbia graduate has published her work at Slant News and the *Columbia Daily Spectator*.

SAMUEL ANDERSON was destined to be editorial fellow at *mental_floss*: Both man and magazine were extras in the 2003 movie *Bad Santa*. "In the original cut, Bernie Mac's character can be seen holding up an early issue," Anderson says. The then-11-year-old Anderson, who has written for nymag.com as a grown-up, made the final reel; *mental_floss* did not.

CARMEN SEGOVIA got an idea or two while working on her drawings for the "Floss 500" (page 26): "I'm going to tell my boyfriend about Nabokov's wife" (and editor, translator, security guard, and muse), says the Barcelona-based illustrator. "Maybe he'll get inspired." Segovia's work has recently graced *The New Republic* and *Nautilus*.

Zurich-based graphic artist **STEPHAN WALTER** has produced work for *Wired*, *Time Out*, *The L.A. Times*, and *The Washington Post*—as well as for Sony, Volkswagen, and David Byrne and Brian Eno. He designed this issue's cover despite a major obstacle: leaving his keys, laptop, and phone in a car headed for Germany. (Never keep everything in one bag, he advises.)

COURTESY GAO, ANDERSON, SEGOVIA, WALTER

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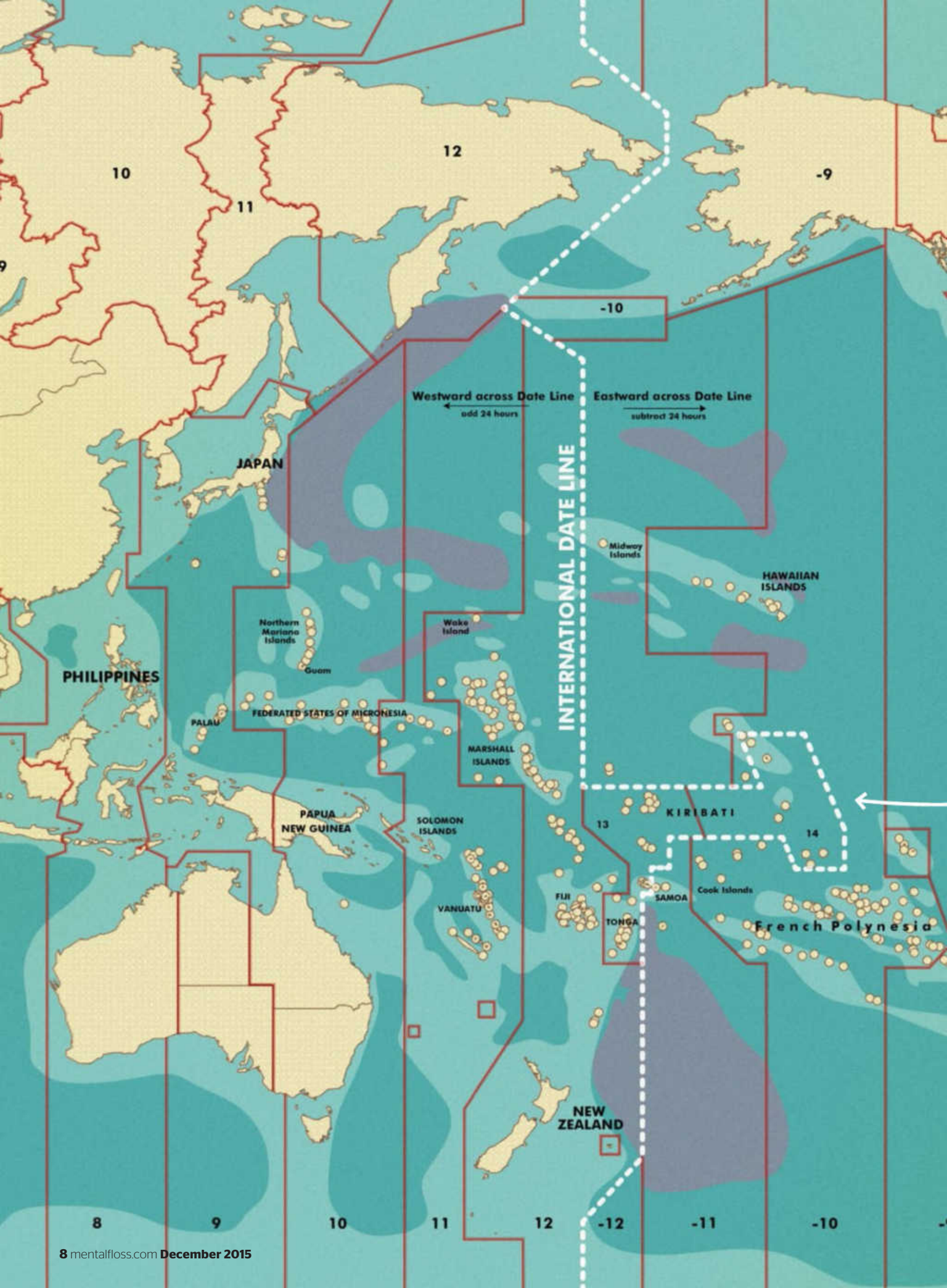
10
11
12
-9
-10
Westward across Date Line
add 24 hours
Eastward across Date Line
subtract 24 hours
INTERNATIONAL DATE LINE
JAPAN
Midway Islands
HAWAIIAN ISLANDS
Northern Mariana Islands
Guam
Wake Island
PHILIPPINES
PALAU
FEDERATED STATES OF MICRONESIA
MARSHALL ISLANDS
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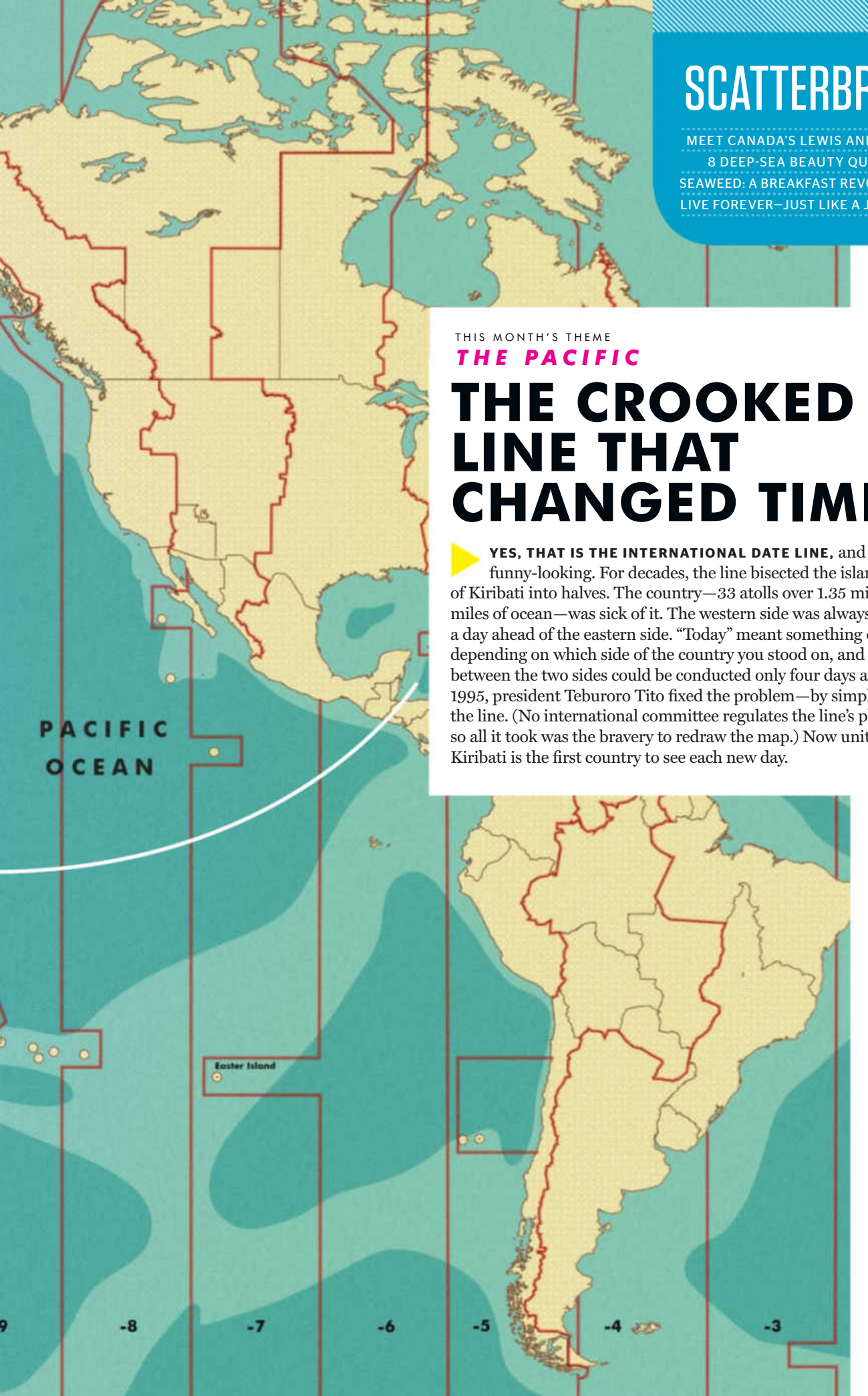
PAPUA NEW GUINEA
SOLOMON ISLANDS
FIJI
SAMOA
Cook Islands
VANUATU
TONGA
French Polynesia
NEW ZEALAND
8
9
10
11
12
-12
-11
-10

THIS MONTH'S THEME
THE PACIFIC

THE CROOKED LINE THAT CHANGED TIME

YES, THAT IS THE INTERNATIONAL DATE LINE, and yes, it's funny-looking. For decades, the line bisected the island republic of Kiribati into halves. The country—33 atolls over 1.35 million square miles of ocean—was sick of it. The western side was always nearly a day ahead of the eastern side. "Today" meant something different depending on which side of the country you stood on, and business between the two sides could be conducted only four days a week. So in 1995, president Teburoro Tito fixed the problem—by simply moving the line. (No international committee regulates the line's placement, so all it took was the bravery to redraw the map.) Now united, all of Kiribati is the first country to see each new day.



LIFE HACK

4 SPECIFICALLY PACIFIC SKILLS

Several ethnic groups in Southeast Asia have adapted to their environment in superhuman ways.

BY **SAMUEL ANDERSON**

SEEING: One group, the Moken, who are concentrated in the islands of the Andaman Sea, have trained their eye muscles to constrict their pupils to a smaller aperture just by swimming a lot, allowing them to see about twice as clearly as the typical human underwater.

SWIMMING: Moken children swim before they can walk. Other groups, such as the Orang Laut in the Riau Islands and the Bajau in eastern Indonesia, spend up to 50 percent of their workday at sea. Thanks to a natural reaction called the mammalian dive reflex, they can lower their heart rate and divert blood from their extremities to vital organs. That means the Bajau can stay underwater for five minutes on one breath.

DIVING: As youngsters, some Bajau will intentionally rupture their eardrums. "You bleed from your ears and nose, and you have to spend a week lying down because of dizziness," Imran Lahassan told *The Guardian*. "After that you can dive without pain."

STORYTELLING: The Moken people have passed down a folk tale for centuries. When the spirits of their ancestors are angry, the ocean recedes and a "wave that eats people" floods the islands. The wave cleanses the land. So when the water retreated before the 2004 tsunami, the Moken knew exactly what to do: They ran to higher ground, taking tourists with them. There were no casualties.

THE INVISIBLE MONEY-EATING MONSTER OF THE PACIFIC

BY **HANNAH KEYSER**

Remember the smoke monster of *Lost*? It has nothing on the jet streams of the Pacific. Earlier this year, the scientific journal *Nature: Climate Change* released a study on the changing jet stream patterns of the last 20 years. In short, the climate is changing, and as a result, the jet stream is getting stronger. So what does that mean for you?

1
MINUTE
The amount of time flights from Los Angeles to Honolulu gain as planes fly against stronger Pacific jet stream winds.

300,000
HOURS
The amount of time this adds up to after totaling carriers on the L.A.–Honolulu route, per year.

1,000,000,000
GALLONS
The amount of extra jet fuel needed to fly these additional hours.

3,000,000,000
DOLLARS
How much that jet fuel will cost.

10,000,000,000
KILOGRAMS
How much CO_2 that jet fuel will release into the atmosphere every year, causing—you guessed it—even more climate change.

FAST FACT

Most large satellites that fall to Earth are entombed in a watery graveyard 2,500 miles off New Zealand's coast.

ILLUSTRATION BY ELLEN SURREY; ALAMY (DIVER)

SCIENCE SAYS

Are Jellyfish the Key to Immortality?

AFTER HE CAUGHT SOME TINY JELLYFISH IN 1988, marine biology student Christian Sommer noticed something strange happening in his petri dishes. The *Turritopsis dohrnii* appeared at first to shrivel up—but Sommer soon realized they were going back to the polyp stage. In other words, they were aging backward. He had discovered the Benjamin Button of the marine kingdom.

T. dohrnii toggles between two life phases: one as a squishy, gelatinous polyp and one as a tentacled medusa. This isn't unusual. Some jellyfish can return to earlier life stages. (Scientists liken the process to a butterfly turning back into a caterpillar.) But unlike other jellyfish, *T. dohrnii* don't lose the ability to turn back the clock once they become sexually mature. The jellyfish can repeat the process indefinitely, so they are, hypothetically speaking, immortal—hence their nickname, "the immortal jellyfish."

This ability is due to a process called transdifferentiation, in which specialized cells transform into new kinds of cells—it's akin to your skin cells turning into muscle cells. The change is controlled by microRNA, molecules that regulate how genes are expressed. Changes to microRNA may be responsible for some cell mutations, like cancer, so studies on the jellyfish could lead to promising research for curing or treating the disease. *T. dohrnii* won't make you live forever, but they just might help us live longer.

THE LINEUP

THE DEEP-SEA BEAUTY PAGEANT

8 remarkable ocean inhabitants and their incredible talents.

BY **SALLY GAO**

1

THE JAPETELLA OCTOPUS

a.k.a. Now You See Me, Now You Don't

REPRESENTING: 3,000 FEET

To evade predators in shallow, sunlit waters, the two-faced japetella is transparent. But in the deep, dark sea, where most hunters search for prey by scattering blue light, it turns dark red. The trick would make any physics teacher proud—the color renders the octopus invisible again.

2

THE ANGLERFISH

a.k.a. Miss Light Up Your Life

REPRESENTING: 2,000–3,000 FEET

Talk about a fairer sex: Only female anglerfish have that forehead-mounted luminous fishing lure. Male anglerfish can't feed themselves without one, so they latch onto a female, fuse with her body, and tap into her circulatory system to survive. The female can carry six or more male fish at a time.

3

THE ENYPNIASTES

a.k.a. The Pink See-Through Fantasia[1]

REPRESENTING: 8,200 FEET

The transparent fantasia leaves little to the imagination—you can see its guts. It also has a built-in burglar alarm: When a predator bumps into the sea cucumber, the enypniastes emits light, exposing its attacker to other predators.

4

THE FANGTOOTH FISH

a.k.a. Miss Ever-Smile

REPRESENTING: 16,000 FEET

The fangtooth boasts the largest teeth-to-body-size ratio in the ocean. Holes in the roof of its mouth act as pockets for the lower fangs—but it still can't close its mouth. Despite that and poor eyesight, it's social, hunting by "contact chemoreception," essentially bumping into prey.

5

THE FRILLED SHARK

a.k.a. Miss Baby-on-Board

REPRESENTING: 5,000 FEET

With over 25 rows of teeth, the frilled shark may be a dentist's nightmare, not to mention a nutritionist's—it'll eat half its body weight in one sitting. But it's also an impressive mother-to-be, sustaining the longest gestation period for a vertebrate: three and a half years.

6

THE NAKED SEA BUTTERFLY

a.k.a. Miss Sexual Dysphoria Cannibal

REPRESENTING: 1,500 FEET

Basically shell-less sea snails, sea butterflies start life as males but may develop eggs later in life. As for diet, they'll eat other species of sea butterflies. Gruesome but graceful, they glide through water flapping a pair of wing-like fins at the top of their body.

[1] We didn't make this nickname up. It's actually called this. By scientists.

7

THE BLACK DRAGONFISH

a.k.a. Miss High Beams

REPRESENTING: 6,000 FEET

Covered in photophores from head to tail fin, when the dragonfish is disturbed, its entire body lights up and the barbell dangling from its chin begins to beam. Unlike many deep-sea creatures, it can perceive light, so it uses it as a flashlight to hunt for prey.

8

THE GIANT ISOPOD

a.k.a. Miss Low Maintenance

REPRESENTING: 7,000 FEET

Many giant isopods will eat only once or twice a year. In 2009, a captured isopod on a hunger strike survived five years without food. The critter, related to the terrestrial wood louse, is also used in a popular brand of Japanese senbei rice crackers.

ALAMY (SEA BUTTERFLY, FANGTOOTH, ANGLERFISH, ISOPOD, FRILLED SHARK, DRAGONFISH)

FLASHBACK

1 CRAZY CURRICULUM

What happens when a boarding school meets a hippie commune? Welcome to Pacific High.

FROM RIDGEMONT HIGH TO *90210*'S WEST BEVERLY, California's legendary high schools have earned their place in America's teenage pop culture canon. But the wildest of all? It was real. In 1961, a group of parents and teachers who'd had "a little too much wine" founded a radically alternative education community they hoped would change the high school experience. Dubbed Pacific High, the school had a nomadic existence at first, but soon settled on a parcel of land in the Santa Cruz Mountains. As former director Michael S. Kaye recounts in his book, *The Teacher Was the Sea*, it was staffed by an endlessly rotating group of teachers (many of whom had no teaching experience), and had no written rules, let alone lesson plans. The kids more or less ran the place until it ceased to exist by the mid-'80s. (And they say millennials are spoiled!) Here are six subjects the student body excelled in. –SALLY GAO

GOVERNMENT AND LAW
Pacific had no hierarchy. Students weren't required to attend class or do their homework. At school-wide meetings, students had as much power as staff—they could even fire their teachers!

PSYCHOLOGY
For a sex and psychology seminar, students determined that a session should be attended in the buff. Only one student stripped down for the class, but nudity was par for the course on campus.

COMPARATIVE RELIGION
Students spent hours meditating and practicing Zen breathing techniques. They also attended Catholic masses and services with Seventh-day Adventists and the Church of Satan.

MARINE BIOLOGY
Police once found a bunch of Pacific students on the beach, and called their director to ask why a teacher wasn't with them. The answer: "The teacher was the sea." They were then taken to juvenile hall.

ENGLISH
To better understand J.R.R. Tolkien's *The Lord of the Rings* concept of hobbit-holes, students dug holes in the woods.

CIVICS AND CRIMINAL JUSTICE
The school once took a weeklong field trip to a demonstration and riot at the Oakland Induction Center, where draftees were examined for service in Vietnam. Three students were arrested.

PHOTO COURTESTY PACIFICHIGHSCHOOL.NET

BIG QUESTION

IS SEAWEED THE NEW BACON?

What's packed with vitamins, minerals, antioxidants, protein, and contains such a wealth of nutrients it might as well be kale—except that it tastes like bacon?

That would be dulse seaweed, and for 15 years, it's been the subject of a study at Oregon State University's Hatfield Marine Science Center. There, researchers have been cultivating a strain of the translucent red seaweed, which grows naturally along the coastline, as a way to feed abalone (a type of shellfish served as a delicacy in Asian restaurants). Last year, an instructor at the business school suggested they farm it for human consumption, making the food far more accessible to the market.

Now OSU is working with chefs in Portland to develop dulse dishes and products like a rice cracker and a salad dressing that have them particularly excited. So it's probably only a matter of time before it shows up for brunch.

That Time Canada Beat Lewis and Clark to the West

Meet the guy who wrote the CliffsNotes to crossing North America.

BY **HANNAH KEYSER**

ANYONE WHO'S EVER MADE a cross-country trip knows the importance of bringing along some good reading material. Just ask Meriwether Lewis, who made his way west with William Clark in 1804, bringing with him a book by Alexander Mackenzie—in which Mackenzie handily laid out how he'd crossed North America 11 years earlier.

On July 3, 1793, Mackenzie, a Scotland-born fur trader, and his crew—two native guides, seven assorted Canadians and Americans, and a dog named "Our Dog"—had been sailing for nearly two months, searching for the Northwest Passage to the Pacific Ocean, when they were forced to abandon their canoe in British Columbia. It was the second time Mackenzie had tried to sail across North America (an earlier attempt dumped him in the Arctic Ocean).

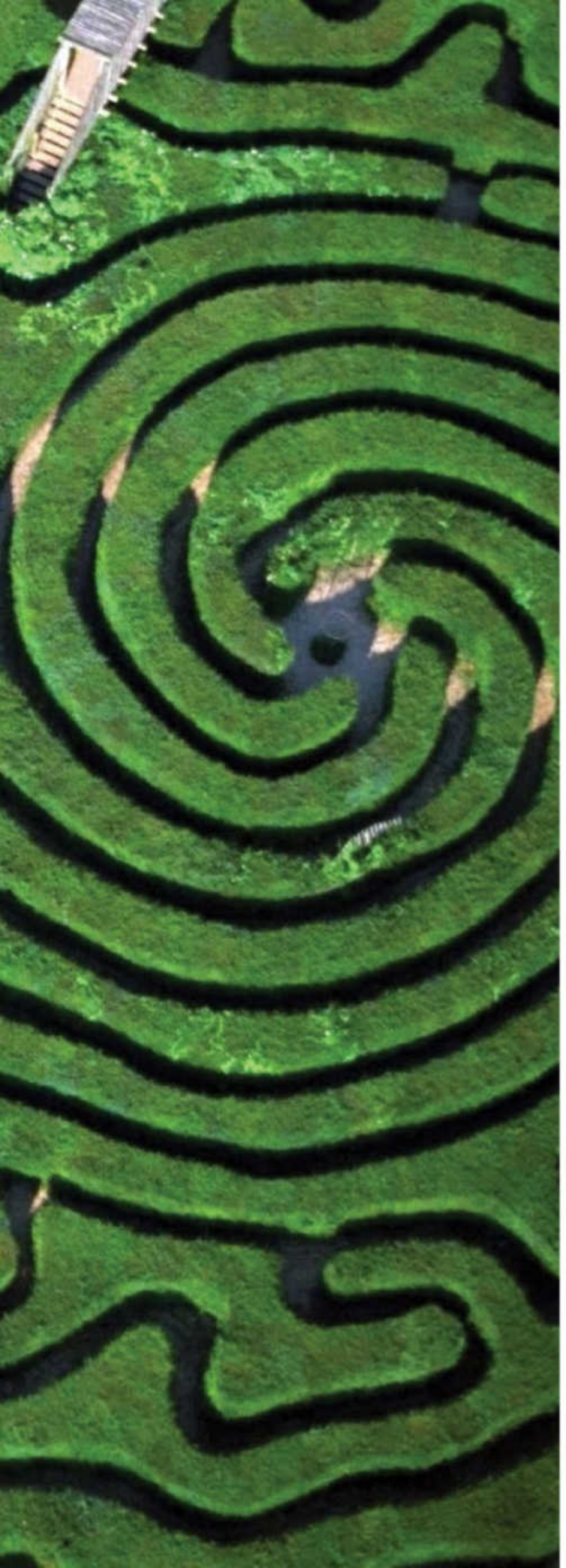
They continued over land, following a grease trail created by indigenous people carrying fish oil from the Pacific. It took 12 days to travel the 180 miles to another river. On July 22, they reached the Bella Coola delta, near modern-day Vancouver, and Mackenzie became the first white guy to cross the continent. Heading home, he wrote a book about his travels. More than a decade later, Thomas Jefferson read Mackenzie's book and gave Lewis and Clark their marching orders, and thus, their legacy. (Canada, on the other hand, has poutine.)

FAST FACT

The first native English speaker to teach English in Japan arrived in 1848. His name? Ranald MacDonald.

ILLUSTRATION BY ELLEN SURREY. STEPHEN WARD, OREGON STATE UNIVERSITY (ALGAE)

ALAMY



LIVE SMARTER

MASTER YOUR NEW YEAR'S RESOLUTIONS ›
THE MOST BRILLIANT LIGHTER EVER ›
HOW TO PARTY LIKE IT'S 1809 ›

THE BEST PLACE IN THE WORLD TO ...

Get Lost!

The world's longest hedge maze, built on the estate of the Marquess of Bath in 1975, is also one extreme landscaping job. So confounding are the 7-foot-tall walls, the maze is dotted with flags on poles that can be raised for rescue if any of Longleat's 400,000 yearly visitors find themselves hopelessly stuck. The grounds need to be trimmed twice a year, a job that once required five gardeners and a whole lot of scaffolding. But in 2012, that changed: The gardeners are now equipped with aluminum stilts so they can find their way around with ease. So while maze runners enjoy losing themselves, the hedge trimmers get a different experience: a bird's-eye view of the best backyard in England.

LONGLEAT HEDGE MAZE

Warminster, England
LENGTH: 1.7 miles
SIZE: 1.5 acres

BRAINTRAINER

Resolve to Resolve Better

BY **FOSTER KAMER**

It's our yearly auld lang sigh: Why do New Year's resolutions persist, when history proves that so many people don't keep them? The fact is, people who make them are nearly twice as likely to change their lives as those who don't[1]. And there are ways to put the odds in your favor. This year, get it right once and for all.

1 STOP TELLING PEOPLE. The urge—or pressure—to tell people about how you're planning to change your life might be strong, but resist it. In fact, hide your resolution from everyone. A 2009 New York University study[2] concluded that when other people notice your new resolve, "one's performance of the intended behaviors is compromised." It's not that they're going to sabotage you—it's that *you* will. Talking about the person you want to be gives you a premature sense of accomplishment, which hampers your desire to keep working hard.

2 THINK SMALL. THINK SIMPLE. When you exercise self-control, it takes energy. Literally. Researchers monitored glucose levels in people who were using their willpower[3]. Their glucose levels dropped, and with them went their self-control. In other words: We have only so much physical energy, and making too many resolutions will dampen your chances of sticking to one of them. Pick one, and remember: The resolutions people are likeliest to keep are both realistic and specific (vague, unrealistic resolutions are just asking for vague, unrealistic results).

3 GO EASY ON YOURSELF. This might sound counterintuitive, but it's true: People with a greater capacity for self-forgiveness are more likely to stay the course after the inevitable slip-up. Attempt to understand why your mistake happened. Then try again: 71 percent of one study's resolvers said their first slip-up was actually a significant boost to achieving their goal. Just remember: This won't happen overnight. You might've heard that it takes 21 days to create a habit—research shows it's more like 90[4].

[1] After six months, anywhere from 44 to 46 percent of resolution-makers have stuck to it! Via: "Auld Lang Syne: Success Predictors, Change Processes, and Self-Reported Outcomes of New Year's Resolvers and Nonresolvers," *Journal of Clinical Psychology,* April 2002, Norcross, J.
[2] "When Intentions Go Public: Does Social Reality Widen the Intention-Behavior Gap?" *Psychological Science*, May 2009, Gollwitzer, P.
[3] "Self-Control Relies on Glucose as a Limited Energy Source," *Journal of Personality and Social Psychology*, 2007, Gailliot, M.
[4] *Changeology: 5 Steps to Realizing Your Goals and Resolutions,* Norcross, J.

THE LITTLE THINGS

The Zippo Lighter

BY **FOSTER KAMER**

PHOTOGRAPHY BY **ROB CULPEPPER**

The Zippo's father is George Grant Blaisdell of Bradford, Pennsylvania. His childhood was only remarkable for how much he hated school—he dropped out in fifth grade and was booted from military school in seventh.

In 1907, Blaisdell's parents gave up on the school thing, training him in metalworking for the family machine factory. He took over the factory, selling it in 1920 and starting the Blaisdell Oil Company.

One night Blaisdell was at a country club when he saw a fellow member lighting a cigarette with an Austrian brass lighter—it was windproof, but ungainly. Blaisdell knew he could do better.

Blaisdell set out to make a windproof lighter that was functional, sturdy, and cool-looking. On March 3, 1936, patent 2,032,695-A was approved. The zipper had recently been invented and he liked the sound of the word, so he borrowed it for his lighter's name: the Zippo.

At first, the Zippo didn't sell—it was, after all, invented during the Great Depression. But the war effort would boost its popularity. They became nearly standard issue on the battlefield for their durability and the ease with which they could be lit and stored.

More than 500 million lighters have been sold since the company began. The design has mostly stayed the same. The company is still in Bradford. And they still honor the lifetime repair warranty they've had since day one: "It works or we fix it free."

IT LOOKS SIMPLE, BUT THE ZIPPO IS A BRILLIANT ARRANGEMENT OF 20 DIFFERENT WORKING PARTS. IT'S REMAINED LARGELY THE SAME SINCE 1946, WHEN THE COMPANY ADJUSTED THE STRIKING WHEEL.

GET IT!
$17,
zippo.com

IN 1957, ZIPPO STARTED IMPRINTING LIGHTER BASES WITH DOTS AND DASHES—A QUALITY CONTROL MECHANISM THAT ALSO IDENTIFIED THE MANUFACTURING YEAR. NOW ZIPPO USES LETTERS AND NUMBERS.

TRY THIS!

HOW TO SABER CHAMPAGNE

Because nothing says "party" like a big knife, pressurized booze, and French military tradition.

BY **FOSTER KAMER**
PHOTOGRAPHY BY **ROB CULPEPPER**

Opening Champagne with a sword may seem like an obnoxious display of hedonism best reserved for czars, princes, and regatta winners. Except: It's a ton of fun. And if you're drinking Champagne to celebrate, why not amp that celebration up a few gigawatts?[1]

One of the best parts of sabering is explaining its history to whomever you're with. The oft-repeated origin myth for the art of *sabrage* invokes Napoleonic-era French soldiers given Champagne before they set off to battle, the presumption being that victory was imminent. Comically, French soldiers found a bottle of Champagne too cumbersome to uncork—especially while on horseback—so they had a better idea: Use a sword! And sabering was (supposedly) born.

The reason sliding a blade up the neck of a Champagne bottle results in a clean opening—and not the comically dramatic explosion pictured here—is a matter of pressure. Champagne bottles hold around 90 PSI, almost three times what car tires have in them. The standard bottle of Champagne has a ¾-inch opening, which adds up to 35 pounds of pressure on the cork. Add two stress concentrations—the lip at the top of the bottle, and the tiny, thin seam running up the bottle's side—and you've got something that's ready to explode. When you drive a sword up the bottle's seam into its lip, the blunt force cracks the bottle open where the seam and lip meet. If done correctly, it cleanly lops the top right off, launching it up to 30 feet and sending that sweet bubbly pouring right out. Cheers!

[1] We know you won't really try this at home; we're obviously just explaining how a professional would do it.

(DON'T) TRY THIS AT HOME

1. **Ice your bottle.** Put it in the freezer or drop its neck into a bucket of ice and water for 30 minutes. This will reduce the pressure (so your cork won't fly off) and compress your glass, making it more prone to a clean break. Rest the bottle upright for a few minutes before proceeding.

2. **Choose your weapon.** No saber? Of course not. You can buy one, but a heavy kitchen knife will do just fine. Whatever it is, it should have a handle that allows you a firm grip. Don't worry about the blade, or its sharpness—you'll be using the blunt side.

3. **Ensure your safety.** Wear protective eyewear. In the event the bottle shatters in your hand, a kitchen towel or a sturdy cloth wrapped around the base of the bottle (where you'll hold it) always helps. And for the love of Napoleon, make sure everyone's standing behind you.

4. **Find the seam.** There's a barely visible line running up the bottle to the lip. That's the path your saber will take.

5. **Prep the bottle.** Unwrap the foil at the top, and take the wire cage off the cork. Be delicate. That thing wants to explode. Hold the blade in your dominant hand and the bottle in the other, at an angle of about 30 degrees.

6. **Off with its head!** In one smooth, firm, quick motion, run the blunt side of your blade up the seam, smacking it into the lip. The vibration and impact will knock the top clear off the bottle. Make sure people have their flutes ready, because bubbly is about to come foaming out. Before you serve, inspect the neck for loose shards of glass. Now bask in the glory of your victorious sabering—the next toast is to you.

The Dog Frisbee Pioneer

How one whippet changed canine athletics (and got his owner arrested in the process).

BY **JAKE ROSSEN**
ILLUSTRATION BY **BYRON EGGENSCHWILER**

IT WAS THE TOP OF THE EIGHTH. The Los Angeles Dodgers were playing the Cincinnati Reds in a game being nationally broadcast by NBC on August 5, 1974. Alex Stein, a scruffy 19-year-old clad in shorts and a T-shirt, walked from the parking lot into the ballpark with a dog following a few feet behind him. Dogs were not allowed on the premises. The security guard eyed Stein. "That your dog?" he asked. "Never seen him before in my life," Stein answered.

As the guard took the trespasser by his collar and shooed him into the lot, Stein found his seat in the top row near the exit. A few moments later, with the guard's attention drifting elsewhere, the dog joined Stein and settled in under his seat. In fact, he did belong to Stein, and he had followed his owner's scent into the bleachers. Everything was going according to plan.

Stein and Ashley, at right, with Hyper Hank, an Australian sheepdog that also excelled at Frisbee, and his owner.

Stein watched the changeover as the Dodgers came up to bat. Then, just as the game was about to resume, he ran down 26 steps to the retaining wall that separated the seats from the field, stopped, and tossed a Frisbee 40 yards. The dog, named Ashley Whippet, bounded over the 3-foot wall and sunk his teeth into the Frisbee before it could touch the ground. The animal seemed to linger in the air like Jordan off the rim, his muscled hind legs propelling him skyward. The crowd roared, and as cameras trained their lenses on the spectacle, the outfielders sat down on the grass and watched.

With 50,000 people cheering in the stands and millions watching at home, Stein and his dog effectively invented the phenomenon known as dog Frisbee.

NO ONE KNOWS WHO FIRST THOUGHT to launch a Frisbee into the air and watch a dog chase it. Originally named Pluto Platters, Frisbees were first marketed by the Wham-O toy company in the late 1950s. They held an inherent catch-and-fetch appeal, and while Stein knew he wasn't the first, he did know he was one of the few taking it seriously.

As a sophomore at Ohio State University in 1971, Stein received a 3-week-old puppy from his girlfriend, Lisa, who had named the dog after Ashley Wilkes in *Gone With the Wind*. Her family bred whippets, lean, muscular dogs reminiscent of greyhounds. Stein took Ashley back to the house he shared with 10 other students and quickly realized he didn't own a dog dish.

"I didn't want to use plates the guys ate off of," he says, "so I grabbed a Frisbee, flipped it upside down, and thought it made a good bowl."

Ashley ate from the Frisbee every day. When Stein dragged the empty disc across his bedroom floor with his toe, he noticed Ashley staring at it like it held the secrets of the universe. Before long, Stein was tossing it to the dog outdoors and hanging it from a tree branch so Ashley could take flying leaps to retrieve it.

Stein was a man of flexible plans. When winter came, he decided he'd rather live in Florida as a warm college dropout than in Ohio as a cold student. Once in their new home of Palm Beach, Stein forged Ashley into an athlete. Measuring just 21 inches at the shoulder and 28 pounds on the scale, Ashley could leap 8 feet into the air from the sand on the beach. "When he got back on grass, it was like being on a trampoline," Stein says. That firmer footing added another 12 inches to his jump.

Stein and Ashley went to the beach nearly every day for years, attracting crowds who couldn't believe the athleticism of the dog, who caught most of Stein's throws. After performances, Stein would pass the Frisbee around, looking for tips. As dollar bills piled up, Stein started to think there might be a bigger audience for Ashley's skills.

In 1974, the two headed for California, where Stein marched into the offices of Wham-O and told them he had a dog unlike any they had ever seen. They weren't interested. (Though he left with a few collectible Frisbees.) Stein then tried cold-calling talent agencies, most of whom didn't deal with animals or didn't understand what Stein was trying to pitch. A neighbor in Manhattan Beach who was an agent shook his head when Stein suggested he throw a cape on Ashley to advertise Domino's Pizza. No one shared Stein's enthusiasm.

COURTESY THE ASHLEY WHIPPET MUSEUM

That's when he came up with a wild idea: storming Dodger Stadium. A radio broadcast mentioned that the Reds would be in town, and so would NBC's cameras. Stein figured it was his chance to get Ashley discovered—even if he did get arrested. He expected he could get three or four throws in before being hauled off, maybe a minute of exposure. That would be enough time to capture the attention of thousands of fans. In the end, "the police report said we were out there for eight minutes," he says. "I think security knew that trying to catch a dog running that fast would not be a good idea."

When Stein left the field, he jogged up the same set of stairs he'd come down on. Security was waiting. They zip-tied his wrists and ushered him to a holding cell full of drunks and thieves. Ashley remained on the field, confused. He wanted to keep playing.

THE PLAN HAD GONE EVEN BETTER than anticipated. While Stein was still in the stadium's holding tank, a man handed him a card through the bars. He was the halftime coordinator for the Los Angeles Rams and wanted the two to appear at their next home game.

Stein was elated. But there was one big problem. In the chaos after the game, Ashley had vanished. Stein called television stations and newspapers to spread the word. Three days after the game, an article caught the attention of a woman in Long Beach whose son had just brought home a dog of unusual aerial skills. She called Stein.

"I go to this house and call his name," he says. "And he comes bounding over the backyard patio."

Reunited, Stein and Ashley wasted no time making the rounds. In addition to the Rams games—where Ashley prepared for his performance by peeing on the goalpost—the two were booked on Merv Griffin, *The Tonight Show*, and Mike Douglas. The ensuing media attention also changed the minds of Wham-O executives, who signed on to co-sponsor the First Annual Fearless Fido Frisbee Fetching Fracas dog competition. Ashley's stunt had inspired the contest, but when Stein showed up to enter Ashley, he was told he wasn't allowed.

"Your dog," an official said, "is a professional. This is for amateurs."

An upstart Australian sheepdog named Hyper Hank won the Fracas and would go on to perform with Stein and Ashley during their pregame, halftime, and racetrack appearances. In one record-setting sprint, Ashley ran 106 yards, almost the length of the football field, to make a catch.

Thanks to Ashley, canine athletics had become a cottage industry. The new popularity of dogs and discs prompted the World Frisbee Championships to begin offering a canine division in 1975. The rules were simple: The winner was the dog who could retrieve the most throws in under two minutes, each at least 15 yards out. Contestants got extra points if all four paws left the ground during their catch.

In the nascent world of dog athletics, Ashley was LeBron James playing pickup basketball. He won the world title three years in a row, sometimes receiving a free pass to the finals as the incumbent champion. By 1978, Stein says, the organization wanted Ashley to step aside and become an ambassador; the contest was later renamed the Ashley Whippet Invitational.

LIKE ANY PROFESSIONAL ATHLETE, Ashley moved on to a series of lucrative endorsement deals. He appeared in ads for dog food companies; Stein would name-drop the brands during their many television appearances. At the height of Ashley's fame in the late 1970s, Stein was pulling in $50,000 in sponsorship money annually. "It wasn't always sex, drugs, and rock 'n' roll," Stein quips. "But some days it was."

Irv Lander, Wham-O's publicity hound and director of the International Frisbee Association, helped book many of their appearances. (He also convinced Wham-O to pay Stein's $250 fine for trespassing on the baseball field.) He kept writing to the White House and insisting Ashley would be an excellent play partner for the Carter family's dog, Grits. Lander was so persistent they finally agreed. In 1977, Stein and Ashley showed Amy Carter, the president's daughter, how to perform some simple Frisbee tricks.

Stein began getting requests for Ashley's offspring. But of the 60-odd puppies the dog sired, only three showed any real intuition for the game. It wasn't his breed or his lineage that made Ashley successful, but his rigorous years of training and innate desire to fetch.

Ashley and Stein continued to appear at football games throughout the early 1980s. Though long retired from active competition, Ashley could still dart across a field. It seemed like age would never catch up with him.

Then, in 1984, the normally mild Ashley got into a fight with one of his pups, who was eager to become the alpha dog. Ashley was put on injury reserve, staying home while Stein traveled with three of his offspring—Lady Ashley, Ashley Whippet Junior, and Ashley Whippet III—as the Ashley Whippet Invitational Celebrity Touring Team.

MEASURING JUST 21 INCHES, ASHLEY COULD LEAP 9 FEET IN THE AIR.

The pioneer would never again take the field. He died in Stein's arms on March 11, 1985, of natural causes at age 13. *Sports Illustrated* eulogized him ("... he was a giant in his field, both a Naismith and a Ruth, the creator of a sport and its greatest practitioner"). A heartbroken Stein traveled for a few more years with Ashley's family before calling it quits to run a deli in Vermont.

Today, the Ashley Whippet Invitational hosts more than 20 regional and international competitions leading up to a finals event each October. The sight of a dog catching a Frisbee is no longer a novelty, but few have been able to duplicate Ashley's formidable speed and grace—or, for that matter, his personality.

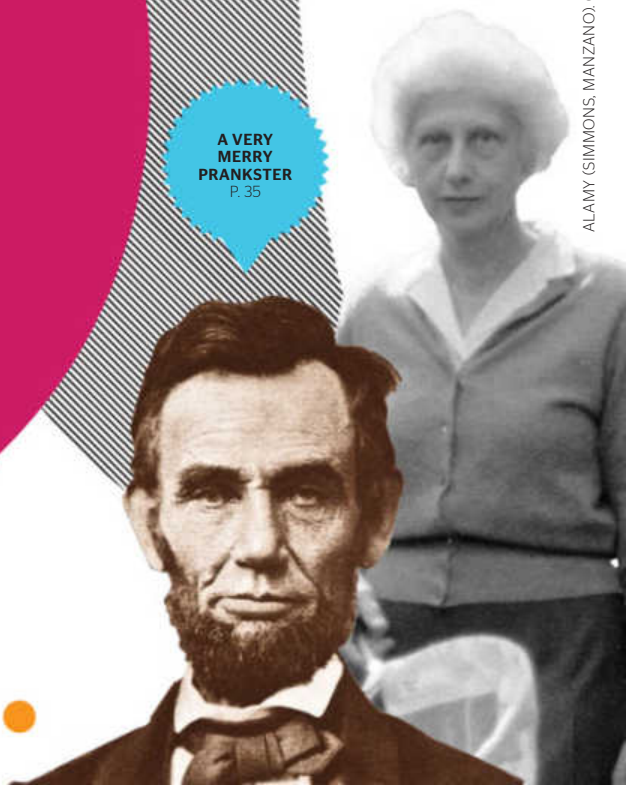
Stein remembers showing up to house parties in college and not being allowed in if Ashley wasn't with him. "That dog," he says, "was loved by everybody."

THE MENTAL_FLOSS

5

NABOKOV'S SECRET WEAPON
P. 30

A VERY MERRY PRANKSTER
P. 35



ALAMY (SIMMONS, MANZANO). GETTY (NABOKOV). CORBIS (LIL BUB). ISTOCK (LINCOLN)

There's a canon of very important people everyone already knows. This is the one you *should* know.[1]

COOLEST. TEACHER. EVER.
P. 37

THE UNIVERSAL DEN MOTHER
P. 59

THANKS, THOMAS EDISON!
P. 34

[1] Note: We have a pretty liberal definition of the word *people*.

THE MENTAL FLOSS 500

The Original Biker Chick

NO. 500
Annie Londonderry
(1870-1947), USA

Annie Cohen Kopchovsky had only touched a bicycle twice in her life when, one day in early June 1894, the Boston mother of three mounted one and headed west. Armed with a revolver and a change of underwear, she'd accepted a challenge posed by two local men over an argument: that the modern woman couldn't do everything a man could—like, say, fund her own trip around the world. Kopchovsky stood to win $10,000 if she could bicycle around the world in 15 months, earning herself $5,000 along the way.

So she did the natural thing: She turned herself into a bicycling billboard, selling ads to sponsors to fund her adventure. For $100 she agreed to go by "Annie Londonderry" as a promo for the Londonderry Lithia Spring Water Company. She first pedaled to Chicago and back, then sailed to France, rode around Egypt, and hit Asia, collecting more cash all the way. When she returned to the United States 15 months later, she regaled the press with tales of time spent in a Japanese prison and on tiger hunts in India with German royalty.

Whether these tales were true wasn't the point. In fact, there's doubt the wager that inspired the trip ever happened at all. More likely, the entire adventure was an ambitious marketing ploy: a clever plot Kopchovsky hatched to fund an incredible journey just for the fun of it—and to make the case that, indeed, a modern woman could do everything a man could.

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ILLUSTRATION BY GARY MUSGRAVE

499. **Bertha Benz**
(1849-1944), GERMANY
She unintentionally made history when, in 1888, she took her teenage sons on a 65-mile car ride now recognized as the world's first road trip.

498. **Vesta Stoudt**
(1891-1966), USA
The mother of two Navy sailors complained to President Franklin Roosevelt that ammo boxes took too long to open, and suggested a rippable, cloth-based tape take its place on the battlefield. Voilà! Duct tape.

497. **Joseph Friedman**
(1900-1982), USA
After watching his toddler daughter struggle to sip a milk shake, Friedman invented the bendy straw. It's since been cited in patents for tampon applicators and smartphone socket extensions.

496
FEBB BURN
(20TH C.), USA
When legislators debated the 19th Amendment for women's suffrage, Burn's son, Harry, became the deciding vote. He opposed it until his mother mailed him a letter saying, "Don't forget to be a good boy." He changed his mind.

NO. 495

WILLIAM JONES
(1675-1749), WALES

Until 1706, pi was known as "the quantity which, when the diameter is multiplied by it, yields the circumference." Jones started using π, making math homework simpler for generations to come.

494. **Aryabhata**
(476-550), INDIA
An Indian mathematician, Aryabhata found pi 1,200 years before the Europeans did.

493. **Olympias**
(375-316 BCE), MACEDONIA
Alexander the Great's mom was pretty, well, great. She slept with snakes, claimed to have been impregnated by Zeus, and ran the empire while Alex was out of town on "business."

492. **Milo of Croton**
(6TH C. BCE), ITALY
The wrestler did CrossFit before it was cool. He worked out by carrying a calf every day—from the day it was born until it was a full-sized ox. On top of having the world's most ripped core, he won six Olympic medals and studied with Pythagoras.

491. **Fanny Blankers-Koen**
(1918-2004), NETHERLANDS
Dubbed the "female athlete of the century," the sprinter won four gold medals at the 1948 Olympics ... while pregnant.

490. **Paul the Octopus**
(2008-2010), GERMANY
In 2010, this aquarium octopus successfully picked 11 out of 13 World Cup winners. When Germany lost to Spain in the semi-finals, fans threatened to kidnap and cook him.

489. **Paul Krugman**
(1953-), USA
Before Krugman was a Nobel-winning economist, he wrote "The Theory of Interstellar Trade," a comical paper on how moving at the speed of light would affect interest rates.

488. **Tycho Brahe**
(1546-1601), SWEDEN
Brahe made major contributions to astronomy, like calculating the position of Mars, despite not having a telescope. He also supposedly owned a pet elk, and hired a clairvoyant jester who told fortunes from under the dinner table.

487. **Harrison Schmitt**
(1935-), USA
An *Apollo 17* astronaut, Schmitt landed on the moon in 1972 and started feeling ill. Years of training couldn't prepare him for what he soon learned—he was allergic to moon dust.

486. **Katherine Johnson**
(1918-), USA
This NASA math guru calculated

THE MENTAL FLOSS 500

10 Unlikely Influencers Who Deserve Their Own Acclaim

The assistants and supporters of legends are heroes in their own right.

485 **Christopher Ludwig** During the Revolutionary War, the Continental Congress appointed him "superintendent of bakers, and director of baking, in the Grand Army of the United States." In 1777, he visited Valley Forge to feed exhausted American soldiers and helped troops survive the brutally cold winter.

484 **Ida Young** Kurt Vonnegut described his childhood cook and housekeeper as one of the biggest influences on his life: "The compassionate, forgiving aspects of my beliefs came from Ida Young."

483 **Morris Karnofksy** A Jewish Lithuanian coal merchant, he helped Louis Armstrong pay for his first cornet. For the rest of his life, Armstrong wore a Star of David around his neck to remember Karnofsky's kindness.

482 **Peter Dinklage's Dog-Sitter** When *Game of Thrones* actor Peter Dinklage won the Emmy for Outstanding Supporting Actor in 2011, he thanked his dog-sitter, Kitty. "She's an important person in my life," he said.

481 **John Greenwood** As George Washington's dentist, he made the president four sets of dentures (made not of wood, but of hippopotamus ivory and gold wire). When Washington's last tooth fell out, he gave it to Greenwood as a gift.

480 **Arthur Alexander** He wrote songs covered by the Beatles, Elvis Presley, Tina Turner, the Rolling Stones, and Bob Dylan. In 1987, Paul McCartney admitted, "We wanted to sound like Arthur Alexander."

479 **Yakima Canutt** The stuntman and son of a rancher mentored and did stunts for John Wayne, who modeled his on-screen persona on Canutt.

478 **Tenzing Norgay** Sir Edmund Hillary gets credit for summitting Mount Everest, but it was the Nepali Sherpa who saved him from tumbling into a crevasse.

477 **Vera Nabokov** She was muse, editor, translator, agent, and security guard, wielding a handgun to protect her husband, Vladimir. When he tried to light his manuscript for *Lolita* on fire, she saved it.

476 **Susan Wojcicki** Before she was YouTube's CEO, Wojcicki paid off her mortgage by renting her garage to two Stanford University students. Her tenants founded Google.

ILLUSTRATION BY CARMEN SEGOVIA

the flight paths for every major space program from Project Mercury through the space shuttle. Her work was so accurate that, when NASA switched to computers, they asked her to check the computer's math for errors.

475. **Karl Kruszelnicki** (1948-), AUSTRALIA
Without his pioneering study on the belly button lint of nearly 5,000 people, we'd never know who's likeliest to get the stuff (older, hairy men, for the record).

474. **Lead Belly** (1888-1949), USA
Huddie "Lead Belly" Ledbetter got out of prison after a musicologist recorded the virtuoso guitarist's pardon plea, which the Texas governor approved. He went on to become one of the most covered and copied musicians of all time.

473. **Khosrovidukht** (8TH C.), ARMENIA
It's probably been a while since you last updated your extensive playlist of Armenian hymns, but we recommend Khosrovidukht's "Zarmanali e Ints." She's the world's first known female musician.

472. **Madam C.J. Walker** (1867-1919), USA
America's first self-made female millionaire, Walker started a line of popular beauty products after having a dream in which a man told

her how to boost hair growth.

471. **Virginia Woolf**
(1882-1941), ENGLAND
She has a reputation as a serious novelist, but Woolf once fooled all of London by donning a fake beard and dressing as an Abyssinian prince. She even snuck onto a Navy boat and got the royal treatment.

470. **D.H. Lawrence**
(1885-1930), ENGLAND
Lawrence enjoyed climbing mulberry trees—naked. He said it "stimulated his thoughts."

469
ANNETTE KOWALSKI
(1944-), USA
In 1982, Kowalski joined a five-day painting seminar. The teacher? Bob Ross. She was so impressed with his skill that she eventually pitched his show to PBS. The rest is happy little history.

468. **Wangari Maathai**
(1940-2011), KENYA
Between planting 51 million trees and helping train 30,000 women in a trade, it's no wonder she was the first African woman to receive a Nobel Prize.

467. **Pericles**
(495-429 BCE), GREECE
This promoter of the arts and literature is responsible for kickstarting the Acropolis. He's the dead guy keeping Greek tourism alive.

466. **Aziz Ansari**
(1983-), USA
In 2013, the comedian tested new material by asking his audiences to submit basic personal information: gender, age, and relationship status. Then he tweaked his act based on the demographic. Who knew big data could lead to big laughs?

465. **Voltaire**
(1694-1778), FRANCE
Funny to the end, Voltaire was asked to renounce Satan on his deathbed. He shot back some of the greatest last words ever spoken: "Now now, dear sir, this is not the time to be making enemies."

464. **Thespis**
(6TH C. BCE), GREECE
The first person to appear on a stage playing a character instead of speaking as himself, he's why actors are called thespians. (He also invented the tragedy.)

463. **Saint Nicholas**
(270-343), TURKEY
You know Saint Nick for inspiring Santa Claus, but the patron saint of repentant thieves and reformed prostitutes was also known for challenging heretics to fistfights. And winning.

462. **Saint Paul**
(5-67), TURKEY
Christianity's greatest proselytizer, Paul is arguably as influential as Jesus. Not to brag, but he wrote 14 of the 27 books in the New Testament.

461. **Jiangang Liu**
(21ST C.), CHINA
In 2014, Liu co-authored the study "Seeing Jesus in Toast: Neural and Behavioral Correlates of Face Pareidolia." The findings? Your English muffin isn't staring at you. You're just hardwired to see faces.

460
ROBERT MATTHEWS
(1959-), ENGLAND
A scientist at Aston University, Matthews conducted a study that dropped 21,000 pieces of buttered toast, finding that the toast landed buttered side down 62 percent of the time.

459. **Matthew Henson**
(1866-1955), USA
Give a toast to the first black Arctic explorer and Robert Peary's

8 REAL SUPERPOWERS OF REAL PEOPLE

458 The Super-Sight of Veronica Seider This German dentist with 20/2 vision (20 times better than average) can identify people from a mile away and once wrote a 20-verse poem on a thumbnail-size piece of paper—sans magnifying glass.

457 The Hot Hands of Tibetan Monks The Dalai Lama has helped spread the practice of tummo meditation, in which monks raise the temperature of their extremities by 17 degrees. For fun, they drape each other with wet sheets on cold nights to see who can dry the most sheets before dawn.

456 The Groovy Mind of Arthur Lintgen After a friend joked that Lintgen knew so much about classical music he could identify records by reading their grooves, he tried it—and found that he could. In 1981, he correctly identified 20 of 20 albums before a live audience.

455 The Furious Fluency of Francis Sommer Able to speak 94 languages, the Cleveland librarian said, "I am afraid to cram any more words into my head. Either the top will come off, or I will wake up speaking Babel."

454-452 The Extra Endurance of Tarahumara Children Thanks to low resting heart rates, people of this tribe from northwestern Mexico regularly run 200 miles—in two days. In the 1920s, when they were invited to run a marathon in Kansas, they purportedly sent three kids to run the mere 26.2 miles.

451 The Incredible Insomnia of Ferdinando Pavoni Plenty of doctors pull odd hours, but this Italian physician beats them all. Until his death in 1950, he hadn't slept in 60 years! He relaxed at night by reading the works of Homer, Virgil, and Dante (which he eventually memorized).

450 The Super-Strength of Louis Cyr The French-Canadian could resist the pull of four horses and lift a platform holding 18 men onto his back. In 1896 he lifted 552 pounds with a finger.

449 The Ridiculous Reflexes of Isao Machii As in the *Matrix*, Machii has superhuman hand-eye coordination. An expert swordsman, he can halve tennis balls hurtling at 400 mph. One time, he sliced a BB pellet traveling 217 mph.

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Do not attempt.

ISTOCK (MASKS)

right-hand man; he helped the expedition reach the North Pole.

448. **James Holman** (1786-1857), ENGLAND
Despite his blindness, the Naval Knight of Windsor circumnavigated the globe alone in 1832 and, by 1851, had visited every inhabited continent. To get around, he used echolocation.

447. **Jeanne Baré** (1740-1807), FRANCE
The first woman to fully circle the globe, Baré tricked 300 sailors into thinking she was a man (ladies weren't allowed on Navy ships). The ruse worked until she hit Tahiti, where natives outed her.

446. **Elspeth Beard** (1957-), ENGLAND
As a student, Beard zipped around the world alone on an old motorcycle she rebuilt herself, covering more than 48,000 miles in three years.

445. **Dean Karnazes** (1962-), USA
After running 50 marathons in 50 days, Karnazes tried running home to San Francisco—all the way from New York. He quit in Missouri, but not because he was tired; he was bored and wanted to see his family.

444. **Kiyoshi Mabuchi** (21ST C.), JAPAN
Slipping on a wayward banana peel is a classic comedy gag, but are the fruits really floor hazards? In a 2012 paper, "Frictional Coefficient Under Banana Skin," his team discovered that a special gel in the banana's skin makes the peel more slippery than other fruits.

443
ERATOSTHENES (276-194 BCE), ALEXANDRIA
The Greek mathematician once accurately measured the earth's circumference—with a stick.

442. **Emmy Noether** (1882-1935), GERMANY
When Einstein calls you a "mathematical genius," you know you've done something great. Noether's work in algebra and physics helped create the math we know today—even though she couldn't teach under her own name (and didn't get paid) for most of her career because she was a woman.

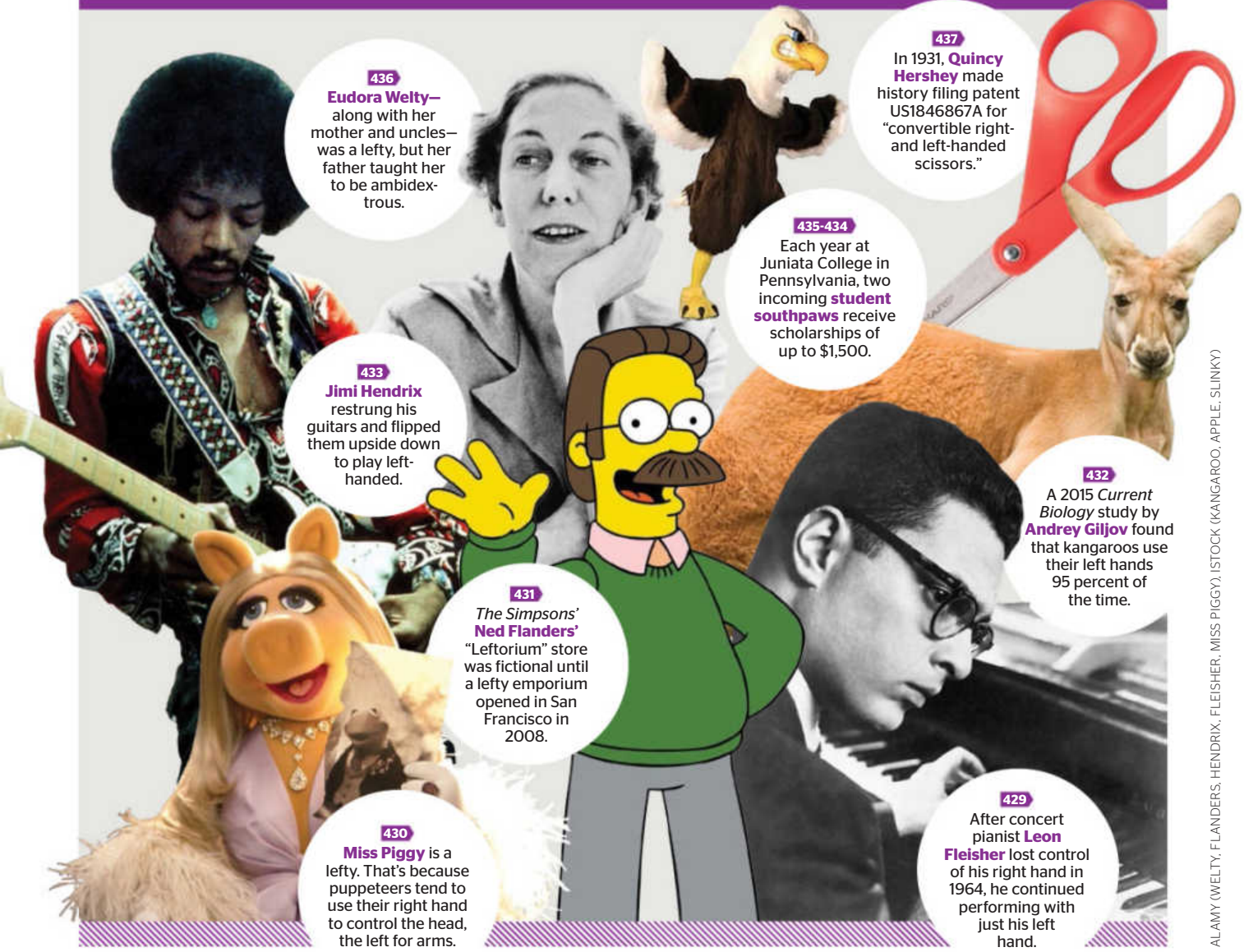
441. **Julia Warhola** (1892-1972), SLOVAKIA
When Andy Warhol was little, his mom encouraged him to draw and often served him Campbell's soup for lunch. When her son finally made it big, she'd claim, "I am Andy Warhol!"

440. **Candido Jacuzzi** (1903-1986), USA
After his 15-month-old son was diagnosed with juvenile arthritis, Jacuzzi designed a pump that turned his bathtub into a therapeutic whirlpool.

439. **Roscoe Turner** (1895-1970), USA
Flying planes is one thing; flying a plane with a pet lion named Gilmore as your co-pilot is quite another.

438. **Lilian Bland** (1878-1971), ENGLAND
The original MacGyver, this aviator built her own plane from spruce, bamboo, canvas, an old whiskey bottle, and an ear trumpet.

THE LEFT-HANDERS' HALL OF FAME



436 **Eudora Welty**—along with her mother and uncles—was a lefty, but her father taught her to be ambidextrous.

437 In 1931, **Quincy Hershey** made history filing patent US1846867A for "convertible right- and left-handed scissors."

435-434 Each year at Juniata College in Pennsylvania, two incoming **student southpaws** receive scholarships of up to $1,500.

433 **Jimi Hendrix** restrung his guitars and flipped them upside down to play left-handed.

432 A 2015 *Current Biology* study by **Andrey Giljov** found that kangaroos use their left hands 95 percent of the time.

431 *The Simpsons'* **Ned Flanders'** "Leftorium" store was fictional until a lefty emporium opened in San Francisco in 2008.

430 **Miss Piggy** is a lefty. That's because puppeteers tend to use their right hand to control the head, the left for arms.

429 After concert pianist **Leon Fleisher** lost control of his right hand in 1964, he continued performing with just his left hand.

ALAMY (WELTY, FLANDERS, HENDRIX, FLEISHER, MISS PIGGY), ISTOCK (KANGAROO, APPLE, SLINKY)

NO. 428

CHASER

(2004-), USA

This border collie has the largest memory of any non-human animal. Using the same inferential skills as toddlers, she can identify 1,000 words and knows the difference between nouns and verbs.

427. **Agent 355**
(18TH C.), USA
A Revolutionary War hero, Agent 355 was a prized member of George Washington's spy ring, snooping on Brits in Manhattan. Her identity is still a secret.

426. **Odoric of Pordenone**
(1286-1331), ITALY
Something of an early diplomat, this Franciscan monk traveled all the way to China in the early 1300s. Sir John Mandeville stole from his travel journals for his work.

425. **Sir John Mandeville**
(C. 1300-1371), ENGLAND
His book, *The Travels of Sir John Mandeville*, was a medieval bestseller and inspired Christopher Columbus's career! Except that most of it was pure plagiarism and lies. Mandeville—who might not have existed—claimed to discover islands of ox-worshipping people with the heads of dogs, cyclopes, and a tribe of dwarves who lived off the smell of wild apples.

424. **Blas de Lezo**
(1689-1741), SPAIN
A one-eyed, one-legged, one-armed pirate hunter, de Lezo managed to fend off 195 British ships in 1741 ... with a fleet of just six.

423. **William Dampier**
(1651-1715), ENGLAND
A pirate and naturalist, Charles Darwin's unofficial reconnaissance man in the Galapagos coined the word *subspecies*.

422
CHING SHIH
(1775-1844), CHINA
Sorry, Blackbeard. The greatest pirate of all time was a woman who managed 40,000 other pirates, fought off the Chinese, British, and Portuguese navies—and was never captured.

421. **Rabban Bar Sauma**
(1220-1294), CHINA
A reverse Marco Polo, he trekked from Beijing to Bordeaux, France. His writings give a rare outside perspective of medieval Europe.

16 Accidental Geniuses

420 **The inventor of plastic** is what **Leo Baekeland** became while searching for a replacement for shellac, the resin secreted by lac bugs.

419 **The father of Sweet 'n Low,** chemist **Constantin Fahlburg,** was experimenting with coal tar one evening in 1877. He forgot to wash his hands before dinner and found everything he tasted was unusually sweet. He had discovered saccharin.

418 **The inventor of Vaseline, Robert Chesebrough,** noticed gunk called rod wax collecting on oil rigs. He realized it could replace lubricants, and ate a spoonful daily.

417 TO 413 **The discoverers of the Lascaux cave—**18-year-old **Marcel Ravidat, his dog Robot, and three friends—** were roaming the forests near Montignac, France, in September 1940 when Robot began sniffing around a hole in the ground. They ventured in and found a cave with Paleolithic paintings dating back 17,000 years.

412 TO 406 **The excavators of the Terra-Cotta Army, seven Chinese farmers** unearthed a life-size army of 8,000 clay soldiers from the 3rd century while digging a well in 1974.

405 **The Slinky** was born in 1943 when **Richard James** was designing a battleship power monitor.

ADVERTISEMENT

BOLD FACT No. 14098
THE FASTEST MOTORCYCLE CAUGHT SPEEDING WAS GOING 205 MPH IN A 65 MPH ZONE.

Professional drivers on closed course.
Do not attempt.

404. **Eduardo Kac**
(1962-), USA
In 2000, Kac convinced a French lab to pluck some green fluorescent proteins from a jellyfish and inject them into a fertilized rabbit egg. The result? A glow-in-the-dark rabbit.

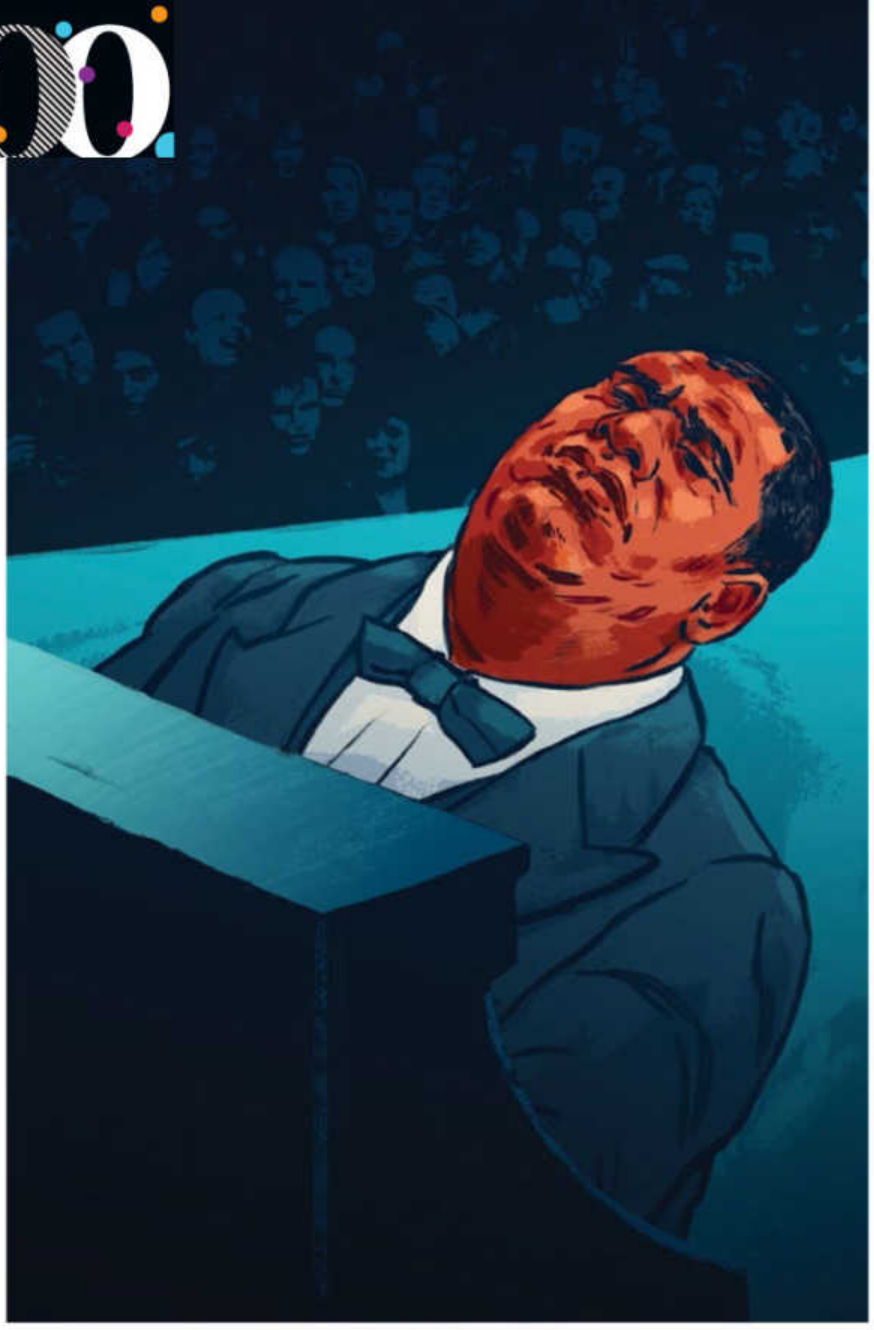
403
MICHAEL JACKSON
(1958-2009), USA
The King of Pop had slick moves, but he had help with his patented "Smooth Criminal Lean." Literally. In 1993, Jackson patented a pair of gravity-defying shoes.

402. **Henry Ford**
(1863-1947), USA
Ford mass-produced everything, including enthusiasm for square dancing. He started a national dance program and required factory workers to attend dance classes.

401. **Thomas Edison**
(1847-1931), USA
In 1894, he recorded the world's first cat video.

400. **Jessica Gall Myrick**
(21ST C.), USA
In 2014, more than 2 million cat videos were posted on YouTube, garnering nearly 26 billion views. Myrick, a professor at Indiana University, published a study to see how they affected our well-being. Her conclusion? A video of Lil Bub is more than entertainment: It's legitimate therapy.

399. **Jack Black**
(19TH C.), ENGLAND
(No relation to Jack Black.)



The First Pop Star

NO. 398
Tom Wiggins
(1849-1908), USA

Born into slavery in 1848, Tom Wiggins seemed like a strange kid. When he'd hear a rooster crow, he'd crow back. He'd drag furniture across the floor just to hear it make a sound. And when he'd hear his slave-master's daughter play piano, he'd hop onto the bench and re-create the piece perfectly, despite not being able to read music, since he was blind. In fact, Wiggins could play any tune after hearing it just once, and once he'd played it, he had it memorized. Soon the 6-year-old prodigy was a sensation, selling out Georgia concert houses and touring nationally. He became the first African American to perform at the White House and packed concert halls around the globe, making him one of the first internationally known popular musicians. Historians later determined he was an autistic savant who had a vocabulary of just 100 words. That didn't stop him from pulling in as much as $100,000 annually. Mark Twain was so mesmerized by his music, he swore that Wiggins was an angel.

The eccentric exterminator who promoted himself as "rat and mole destroyer to Her Majesty," Black explored London's sewers with a legion of pet ferrets, which helped him catch vermin.

397. **Larry the Cat**
(2007-), ENGLAND
Since Henry VIII, the British government has employed a Chief Mouser. Larry reports to the prime minister and holds an indefinite term.

396. **Nim Chimpsky**
(1973-2000), USA
Named after linguist Noam Chomsky, the chimpanzee reportedly learned fragmented sign language. Which, frankly, is better than most humans manage.

395. **Molly the Cow**
(C. 2006-), USA
After escaping a Montana slaughterhouse, Molly led police on a six-hour chase, dodged a train, and forged the Missouri River before getting caught. Impressed, the packing plant owner granted Molly her freedom. She now lives on a farm.

394. **Temple Grandin**
(1947-), USA
One of the first autistic people to earn a PhD, Grandin is also the world's foremost expert on humane livestock handling.

393-390. **The Monuments Men**
(1943-1946), USA
This task force—George Stout, James Rorimer, Walker Hancock, and Ralph Hammett, among others—saved thousands of pieces of priceless art from ruin by the Nazis.

389. **Irena Sendler**
(1910-2008), POLAND

ILLUSTRATION BY BRANDON LOVING

World War II's Harriet Tubman, Sendler smuggled more than 2,500 Jewish children out of Poland.

388. **Luis Martins de Souza Dantas**
(1876-1954), BRAZIL
Brazil's ambassador to France granted diplomatic visas to anyone who wanted to escape the Nazis, despite his superiors forbidding it. He saved some 800 lives.

387
SUSILO BAMBANG YUDHOYONO
(1949-), INDONESIA
Since becoming president of Indonesia, Yudhoyono has released three pop music albums. His last was titled *I'm Sure I'll Get There*, which is a great slogan for any politician.

386. **Kim Jong-il**
(1941-2011), NORTH KOREA
While nobody outside of North Korea was a fan of the dictator's politics or human rights record, he supposedly wrote six operas that, according to his official biography, are "better than any in the history of music." He also wrote the book *On the Art of Opera*.

385. **Ahmad al-Buni**
(13TH C.), ALGERIA
An Arab mathematician, al-Buni has helped millions burn time. His "magic squares" are basically ancient Sudoku puzzles.

384. **Abraham Lincoln**
(1809-1865), USA
Teenage prankster Abe noticed two boys playing barefoot by a mud puddle. Sensing an opportunity, he brought them into his house, held them upside down, and asked them to "walk" across the ceiling, leaving a trail of brown footprints. (He had to repaint the ceiling.)

383. **Bun Lai**
(1971-), USA
The environment is full of non-native animals and plants that can hurt an ecosystem. Bun Lai, a sushi chef, is tackling the problem with his palate. His Connecticut restaurant, Miya's Sushi, serves invasive species as delicacies.

372. **Mark Fonstad**
(1973-), USA
In 2003, Fonstad and two other researchers from Texas and Arizona State universities analyzed the topography of an IHOP pancake and compared it with the state of Kansas. It's true: Kansas is flatter than a pancake.

371. **John Dury**
(1596-1680), SCOTLAND
Before Dury, most libraries weren't open to the public. And if you were allowed inside, you were forbidden from borrowing anything—books were chained to shelves! Dury suggested making libraries public to communicate "all good things freely to others."

370. **Asa Griggs Candler**
(1851-1929), USA
Candler knew a deal when he saw one. In 1888, he bought stake in an unknown, cocaine-laced drink from its inventor for $550. A few years later, he bought out the other shareholders and built a soft drink empire: Coca-Cola. The rest is history.

369. **Princess Ennigaldi-Nanna**
(C. 500 BCE), BABYLONIA
The high priestess curated the world's first museum of antiquity ... during antiquity.

368. **John Lomax**
(1867-1948), USA
This pioneering musicologist preserved thousands of folk songs. Without him, "Little Dogies" wouldn't "Git Along," and we'd have no "Home on the Range."

367-365
THE NYACK GHOSTS
(UNDEAD), USA
In 1989, Jeffrey Stambovsky bought a house haunted by three ghosts. The owner hadn't told him about them, and when Stambovsky found out, he sued. The New York Appellate Court ruled that if you unwittingly buy a known haunted house, you can break the contract.

364. **Tião dos Santos**
(21ST C.), BRAZIL
In Brazil, scavengers called *catadores* roam landfills, turning trash into jewelry, art, and furniture. Dos Santos fights for each worker's rights to a living wage—representing about 800,000 people.

363. **The Roomba**
(2002-), USA
What other robot vacuum has sold more than 10 million units worldwide, played a pivotal role on *Breaking Bad*, and serves as a viral transportation system for cats?

362-351 **The Wrecking Crew**
(1962-1975), USA
In the 1960s and '70s, recording artists didn't have to play a single chord in the studio. Instead, they enlisted this prolific group of incognito musicians who laid tracks for everybody from the Beach Boys to Cher.

350. **Mehter Band**
(C. 1300), OTTOMAN EMPIRE
Seven hundred years before John Philip Sousa, the mehters were the world's first marching band. Each musician doubled

10 FACES YOU DIDN'T KNOW YOU KNOW

382
Rosie the Riveter
The iconic image was based on cellist Geraldine Hoff. Hoff actually did work in a factory, but quit, fearing injury to her hands.

381
Sacajawea
How do you end up on the U.S. Mint's newest coin? Ask the mom of Randy'L He-dow Teton, who signed her up for the gig.

380
***Nevermind*'s Cover Baby**
Spencer Elden's dad got $200 to toss his baby son into a pool for a photo shoot—for Nirvana.

379
Coppertone Baby
Cheri Brand was the 3-year-old daughter of Joyce Ballantyne Brand, who drew the ad for $2,500 in 1959.

378
Captain Birdseye
The Birds Eye frozen food mascot was portrayed by English theater actor John Hewer for 31 years.

377
Sun-Maid Girl
A Sun-Maid executive spotted Lorraine Collett in her backyard—and asked her to model.

376
Coca-Cola's Santa Claus
Lou Prentiss, a kind-faced retired salesman, modeled for his friend, painter Haddon Sundblom.

375
Chiquita Banana Lady
Carmen Miranda's tutti frutti hat in 1943's *The Gang's All Here* inspired the Chiquita Banana illustration.

374-373
***American Gothic* "Couple"**
Nan Wood and B.H. McKeeby were (respectively) the sister and dentist of artist Grant Wood.

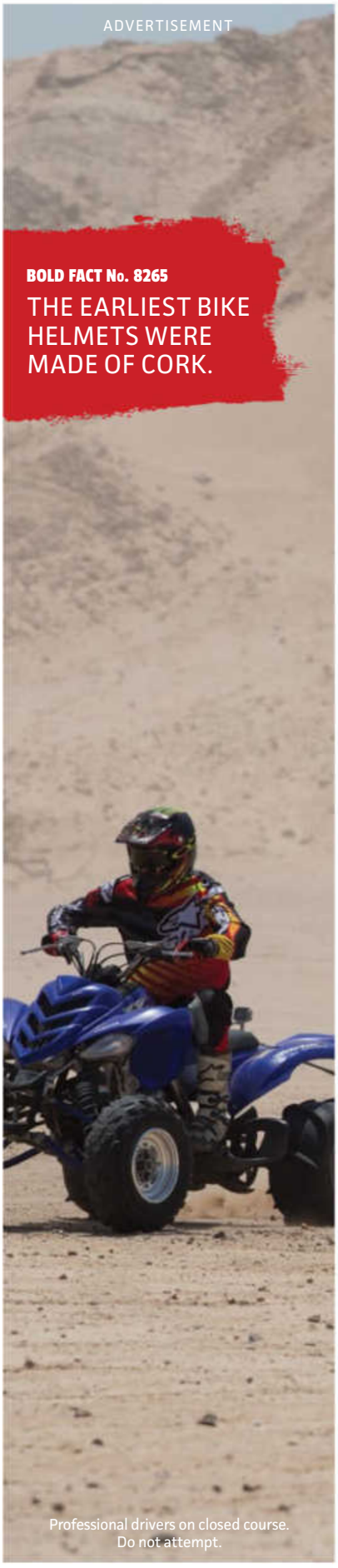
ALAMY (ROSIE, *NEVERMIND*, *AMERICAN GOTHIC*), ISTOCK (SUNMAID RAISINS, SACAJAWEA COIN, CAT)

NO. 349

CAROLYN HOPKINS
(C. 1948-), USA

If you travel, you know Hopkins. Her folksy voice booms over the PA system of 200 airports, countless train stations, and the New York City subway. Those automated TV weather warnings? That's her too.

ADVERTISEMENT



BOLD FACT No. 8265
THE EARLIEST BIKE HELMETS WERE MADE OF CORK.

Professional drivers on closed course.
Do not attempt.

THE MENTAL FLOSS 500

7 People Who Built Our World

You know the buildings, but do you know the people who made them possible?

347 **Elizabeth Tower**
Erroneously called Big Ben (that's the clock bell's name), the tower was designed in 1852 by **Augustus Welby Northmore Pugin,** who wins *mental_floss*'s coveted "The Most British Name Ever" award.

348 **Château de Chenonceau**
Katherine Briçonnet was history's first female architect, overseeing work on the 16th-century French château.

as an infantryman, making for rather interesting "this one time at band camp" jokes.

341. **Encino Man** (STONE AGE), SAHARA
Cavemen threw literal rock concerts. The Natural History Museum of Paris had a handful of oblong rocks, thought to be Stone Age pestles for grinding grain. But one day, somebody tapped one with a mallet—and realized it was a prehistoric xylophone.

340-338. **Critics with Statues**
Composer Jean Sibelius said "Remember, a statue has never been set up in honor of a critic!"

THE REAL INSPIRATIONS OF 10 POP HITS

337 **Vince Neil** of Mötley Crüe has such luxuriant hair it was the basis for Aerosmith's "Dude (Looks Like a Lady)."

336 **William Tager** yelled "Kenneth, what is the frequency?" when attacking Dan Rather in 1986. R.E.M. asked it again in 1994's "What's the Frequency, Kenneth?"

335 **Gary's Girl.** Rick Springfield took a stained glass class with a guy named Gary. He couldn't take his eyes off Gary's—or "Jessie's"—girl.

334 **Scrambled Eggs.** Originally, Paul McCartney sang "Yesterday" as "Scrambled eggs / Oh, my baby how I love your legs."

333 **Caroline Kennedy,** according to lore, inspired "Sweet Caroline." Neil Diamond later backtracked, saying JFK's daughter's name simply fit better than "Sweet Marsha"—his wife's name.

332 **Pattie Boyd,** George Harrison's wife, inspired three tunes: Harrison's "Something" and Eric Clapton's "Layla" and "Wonderful Tonight."

331 **Elle Macpherson** was dating Billy Joel when she inspired "Uptown Girl."

330 **Igor in *Young Frankenstein*.** Aerosmith watched Mel Brooks's film—with Igor's classic direction—and wrote the lyrics to "Walk This Way."

ISTOCK (CHENONCEAU, ELIZABETH TOWER, WILLIS TOWER, ST BASIL'S, WORLD TRADE, STREET SIGN)

346 TO 345

The Willis Tower
Chicago's tallest building is structurally stable thanks to a bundle of nine huge tubes, an idea **Bruce Graham** and **Fazlur Rhaman Khan** struck upon after Graham grabbed a handful of Camel cigarettes out of his pocket in 1970.

344 **1 World Trade Center** Senior technical architect **Nicole Dosso** was in charge of constructing the tallest building in the United States, which, upon its 2013 completion, rose to a symbolic 1,776 feet.

343 **St. Basil's Cathedral**
(Dubious) legend has it that **Postnik Yakovlev** was blinded by Ivan the Terrible after finishing the cathedral in 1561 so that he couldn't build a rival to it.

342 **Guangzhou Opera House**
Completed in 2010, **Zaha Hadid**'s opera house on China's Pearl River is designed to resemble two pebbles eroded by a stream.

ALAMY (GUANGZHOU OPERA HOUSE)

Not quite. Critics Charles Augustin Sainte-Beuve, Vladimir Stasov, and Roger Ebert all have statues in their honor.

329. **Li Fang**
(925-996), CHINA
The editor of the *Four Great Books of Song* was no slouch. The work was one of the first encyclopedias, boasting 3,500 volumes purporting to contain all the knowledge within the Song dynasty.

328. **Biddy Mason**
(1818-1891), USA
Born into slavery, Mason saved enough money to become one of the first black landowners in Los Angeles. Then she worked her way up to make nearly $7 million in today's money—and gave it away.

327. **Adrian Frutiger**
(1928-2015), SWITZERLAND
Frutiger designed the typefaces for London's street signs, the Paris Metro, San Francisco's BART system, countless European airports, and Apple's old keyboards.

326. **Helen Holmes**
(1892-1950), USA
The world's first female action hero, the 22-year-old made 26 silent films titled "The Hazards of Helen" in 1914 alone. She performed her own stunts, fighting on top of moving cars and riding a motorcycle off a bridge and into a river.

325
SAMUEL BECKETT
(1906-1989), IRELAND
Sure, he wrote *Waiting for Godot*. But he also drove André the Giant to school each morning. André couldn't fit into the school bus, so Beckett (his neighbor) chauffeured him.

324. **Zeami Motokiyo**
(1363-1443), JAPAN
This Noh playwright put Shakespeare to shame. He wrote 90 plays, more than double the Bard's output.

323. **Gene Simmons**
(1949-), USA
The Kiss frontman taught sixth-graders in Harlem and was fired for replacing Shakespeare with *Spider-Man* comics.

322. **Musa I of Mali**
(1280-1337), MALI
The richest man in history, Musa was worth $400 billion in today's money. On a pilgrimage to Mecca, Musa gave thousands of pounds of gold to the poor—so much that it lost practically all value. It took the economy years to recover.

ADVERTISEMENT

BOLD FACT No. 28365
THE FASTEST COUCH CRUISE CLOCKED IN AT 92 MPH. THE HIGH-PERFORMANCE SOFA WAS FULLY FURNISHED WITH A DESK, PLANTS, AND A PLATE OF COOKIES!

321. **John Fairfax**
(1937-2012), ENGLAND
At 13, the adventurer ran away to live in the Amazon jungle. After a failed suicide attempt—which involved a jaguar—he signed up to be a pirate's apprentice and opened a mink farm. Then he became the first person to row solo across an ocean.

320. **Hattori Hanzo**
(1542-1596), JAPAN
A legendary samurai, Hanzo was an accomplished ninja by age 12. He was so good at sneaking around that people believed he was invisible.

319. **Louisa Boyd Yeomans King**
(1863-1948), USA
During World War I, King helped put 20,000 women known as farmerettes on farms, an effort that kept the agriculture industry afloat while thousands of farmers were busy fighting overseas.

318. **Roxelana**
(1504-1558), OTTOMAN EMPIRE
A captured slave, Roxy eventually married a sultan and ran the entire empire, ushering in what historians call the "reign of women."

317. **Galvarino**
(C. 1550), CHILE
The indigenous warrior lost both of his hands after the Spanish captured him during the Arauco War. Undeterred, Galvarino fought back by replacing his hands with knives.

316. **Toussaint Louverture**
(1743-1803), HAITI
The military leader guided a rebellion that freed an entire society of slaves, leading to the creation of Haiti. His victory was a major factor in changing European minds about slavery.

315
GIOVANNI BATTISTA BELZONI
(1788-1823), ITALY
An Egyptologist, he traded in his career as a meathead—he was a former circus strongman—to be an egghead. He's best known for breaking into the second pyramid of Giza.

314. **Yoshida Oikaze**
(C. 1758-1806), JAPAN
How did a sport best known for loincloths become Japan's quintessential pastime? Oikaze legitimized sumo wrestling by steeping it in crowd-pleasing shinto rituals and, of course, funding.

313. **Josh Gibson**
(1911-1947), USA
Dubbed the black Babe Ruth, the Negro League baseball legend possibly hit 200 more home runs than the Sultan of Swat. Maybe Ruth should be called the "white Josh Gibson"?

312. **Babe Didrikson**
(1911-1956), USA
Jim Thorpe gets called the "World's Greatest Athlete" a lot, but Didrikson makes him look like a one-trick pony. She excelled at golf, basketball, boxing, bowling, billiards, cycling, tennis, handball, volleyball, and baseball. One time, a reporter asked, "Is there anything you don't play?" Her response: "Yeah, dolls."

311. **Ibn Battuta**
(1304-1377), MOROCCO
Arguably the greatest traveler of all time, Battuta mounted a donkey when he was 21 and kept riding until he hit the

Lofty Ambitions

NO. 310
Abbas Ibn Firnas
(810-887), Spain

In 852, Abbas Ibn Firnas donned a winged cloak made of silk and wood supports and jumped from a minaret at the Grand Mosque in Cordoba. He believed he could hang-glide to safety, but his wings weren't strong enough. As he fell, his cloak inflated enough to slow his descent—ensuring Ibn Firnas's legacy as the accidental inventor of the world's first parachute.

Decades later, proving his spirit was unflappable, the polymath tried to fly again. In 875, he built a flapping glider and covered his body in bird feathers. "By guiding these wings up and down," he said, "I should ascend like the birds." A small crowd gathered at a cliff and nervously watched the 65-year-old jump. He plummeted at first, but suddenly caught a breeze and began to glide. "He flew a considerable distance as if he had been a bird," witnesses said. It was the first recorded flight in history.

ILLUSTRATION BY GARY MUSGRAVE

Great Wall of China. By the time he returned home, he was 45.

309. **Zheng He**
(1371-1433), CHINA
Decades before Christopher Columbus was even born, Zheng led seven major expeditions, sailing from China all the way to East Africa. His ships were so big that they required nine masts. Columbus's entire fleet could have fit on the deck, with room to spare.

308-305. **The (Honorary) Harlem Globetrotters**
(1926-), GLOBAL
What do Whoopi Goldberg, Bob Hope, Jackie Joyner-Kersee, and Henry Kissinger all have in common? They're honorary members of everybody's favorite exhibition basketball team.

304. **Pope Francis**
(1936-), ARGENTINA
Another honorary Globetrotter, Francis knows how to play tough. As a cash-strapped student in Buenos Aires, he worked as a nightclub bouncer.

303. **Heather McKay**
(1941-), AUSTRALIA
The squash player went undefeated—for 19 years. It's the longest winning streak in sports history.

302. **Robert Smalls**
(1839-1915), USA
A slave during the Civil War, he stole a Confederate ship, steered it to freedom, and gave it to the Union. After the war, he bought his former master's house and became a congressman: revenge done right.

301. **Imhotep**
(27TH C. BCE.), EGYPT
Imhotep, the world's first architect and physician, created a whole new way to hold up buildings—columns.

300. **Frank Wills**
(1948-2000), USA
When the 24-year-old security guard at the Watergate office building noticed tape covering the basement door's lock, he called the police. Two years later, President Nixon resigned.

299. **Mary Katherine Goddard**
(1738-1816), USA
A Baltimore newspaper publisher, Goddard was the first to print the Declaration of Independence with the signers' names, forcing Hancock's crew to back up words with action.

298. **John Paul Jones**
(1747-1792), USA
Little-known history: America invaded Britain during the Revolutionary War. In 1778, Jones and his crew stormed England, but when crew members were sent to raid a pub, they got distracted and spent most of the invasion drinking.

297
DEBORAH SAMPSON
(1760-1827), USA
The 5-foot-8 woman disguised herself as a man to fight in the Revolutionary War. When she was struck in the thigh by two musket balls, she removed one of them herself with a sewing needle to avoid revealing her identity at the hospital.

296. **Johann Rall**
(1726-1776), GERMANY
The Hessian colonel was so involved in a game of cards (or chess) one night that he ignored a note stating that George Washington and his men were planning to secretly cross the Delaware River and attack.

295. **Annette Kellerman**
(1886-1975), AUSTRALIA
A champion synchronized swimmer and vaudeville

5 Goats That Changed the World

294 **The Bravest Goat** During World War I, a crew of Canadian soldiers procured a goat and smuggled it into France. There, "Sergeant Bill" suffered shrapnel wounds and was arrested for eating military equipment. He'd later save three lives, head-butting men into a trench as a shell exploded nearby.

293 **The Archaeologist Goat** In 1947, a group of Bedouin herders were searching for a lost goat when one goatherd stumbled into a cave full of clay jars stuffed with ancient papyrus—the Dead Sea Scrolls.

292 **The Caffeinated Goat** According to legend, coffee was discovered after a 9th-century Ethiopian herder noticed his goats went crazy whenever they nibbled on the berries of the *Coffea arabica* tree.

291 **The Power Goat** In 1986, Clay Henry was elected mayor of Lajitas, Texas, population 100. It wouldn't have been a big deal if it weren't for the fact that Clay was a beer-drinking goat.

290 **The Dread Pirate Goat** A criminal and river pirate, Sadie Farrell was known as "Sadie the Goat" because she incapacitated her victims by head-butting them. (Also, she was a human.)

ADVERTISEMENT

BOLD FACT No. 23
BUNGEE JUMPING WAS INVENTED BY A GROUP OF THRILL-SEEKERS BASED IN OXFORD AND LONDON.

Professional stuntperson on closed course. Do not attempt.

ISTOCK (GOAT, KNIFE)

ADVERTISEMENT

BOLD FACT No. 657

THE FIRST BUNGEE JUMP—A BACKFLIP OFF A BRIDGE 250 FEET ABOVE A RIVER IN BRISTOL, ENGLAND—HAPPENED ON APRIL FOOL'S DAY 1979.

Professional stuntperson on closed course. Do not attempt.

20 Brilliant Inventions!

And their equally brilliant inventors

289 **Sea Monkeys!** (1957) Inspired by a visit to the pet store, **Harold von Braunhut** marketed brine shrimp eggs as "Instant Life."

288 **TV!** (1927) Inventor **Philo Farnsworth** hated his brainchild and actually banned it in his own household. "There's nothing on it worthwhile," he said.

287 **Beer Keg Tap!** (1910) **Richard Spikes** also made the gear shift, shoe shine chair, automatic car washer, and multibarrel machine gun.

286 **Muzak!** (1910) The gentle, wimpy music piped into elevators was invented by macho man **Major General George Owen Squier.**

285 **Karaoke!** (1971) An admittedly terrible drummer, bar musician **Daisuke Inoue** created karaoke tracks—for when he didn't feel like playing.

284 **Crossword Puzzles!** (1913) **Arthur Wynne**'s first puzzle, created for a newspaper as a "mental exercise," included words like *nard*, *tane*, and *doh*.

283 **Recipes!** (1896) *Boston Cooking-School Cook Book* author **Fannie Farmer** pioneered standardized recipe measurements.

282 **The Jigsaw Puzzle!** (1766) A cartographer, **John Spilsbury** carved up a world map as an educational tool.

281 **The Flushing Toilet!** (1596) "The john" refers to **Sir John Harington.** *Game of Thrones*' Kit Harington is a descendant.

280 **Kitty Litter!** (1947) **Edward Lowe** gave a cat-loving neighbor a bag of industrial granulated clay, prompting a $2 billion industry.

279 **Liquid Paper!** (1956) Secretary **Bette Graham** was also a window artist who painted over her errors, inspiring her idea for fixing typos.

278 **The Pool Noodle!** (1984) Nobody wanted **Steve Hartman**'s foam floater 30 years ago. Now, 6 to 8 million sell annually.

277 **Quiz Bowl!** (1940s) The game was first conceived as a USO activity by **Don Reid,** who later created NBC's *College Bowl*.

276 **Play-Doh!** (1955) Originally created as wallpaper cleaner, **Joe McVicker**'s Play-Doh has sold more than 2 billion cans since its birth.

275 **The Bikini!** (1946) After a tiny swimsuit called "the atom" appeared, **Louis Réard** made a tinier suit dubbed "the bikini," after the Bikini Atoll nuclear test site.

274 **Pogs!** (1991) Teacher **Blossom Galbiso** revived the 17th-century Japanese game of Menko for her math class.

273 **The Remote Control!** (1955) Designed by **Eugene Polley,** the first clicker was called the Flash-Matic. It resembled a ray gun.

272 **The Pull-Tab Can!** (1963) **Ernie Fraze** got the idea for the pull-tab after he couldn't find a can opener at a picnic.

271 **The Spork!** (1874) The hybrid utensil's patentee, **Samuel W. Francis,** also invented a self-opening coffin.

270 **The Troll Doll!** (1959) **Thomas Dam** carved the first wooden troll as a cheap gift. He missed out on $4 billion due to copyright error.

ISTOCK (TROLL, PLAY-DOH, PULL-TAB)

star, Kellerman was arrested in 1907 for indecency when she publicly appeared in the world's first one-piece bathing suit—scandalous!

269. **Moderata Fonte** (1555-1592), ITALY
The Amy Schumer of the 16th century, Fonte wrote witty feminist prose, penning sentences like, "You ought to consider the fact that [history books] have been written by men, who never tell the truth except by accident." Ouch.

268. **Potooooooooo** (1773-1800), ENGLAND
Also known as Pot-8-Os, the thoroughbred was one of the greatest racehorses of all time. He acquired the unique name because his stable lad didn't know how to spell *potato*.

267. **The Tanzanian Rat** (21ST C.), TANZANIA
In Tanzania, African giant pouched rats save lives by sniffing out land mines. Equipped with an excellent sense of smell, the rodents—too light to set off explosives—are trained to detect buried TNT. According to the NGO Apopo, the rats can do in just 20 minutes what it typically takes a metal detector five days to do. So far, they've uncovered 48,000 mines.

266. **Trakr the Dog** (1994-2009), CANADA
The former police dog came out of retirement to help search the rubble of Ground Zero after the September 11 attacks and located the last survivor. In 2011, he was cloned five times.

265. **The Brussels Griffon Dog** (21ST C.), USA
George Lucas owned several pups, which inspired the *Star Wars* ewoks.

264. **Miss Baker** (1957-1984), USA
This squirrel monkey was the first monkeynaut to fly in space and return alive.

263-262. **Scott and Mark Kelly** (1964-), USA
Identical twin astronauts, the Kellys are part of a NASA genetics study investigating the effects living in space has on the body. While Scott carries out a one-year mission in space right now, Mark is acting as the control on Earth.

261
ANATOLI PETROVICH BUGORSKI (1942-), RUSSIA
Bugorski stuck his head inside a particle accelerator—and survived. He was checking a broken part when a proton beam zoomed through his skull at the speed of light. The radiation was 1,000 times the fatal limit, but Bugorski survived! He lost hearing in one ear, and now the left side of his face refuses to wrinkle.

260. **Nicolaus Copernicus** (1473-1543), PRUSSIA
You know him as the guy who said the Earth wasn't the center of the universe. Economists know him as the first person to outline the "quantity theory of money," arguing that prices vary with a society's money supply.

259. **Emperor Wu-tsung** (814-846), CHINA
Under this Tang Dynasty emperor, China produced the world's first paper money. (He was, presumably, the first person to make it rain.)

258. **Preston McAfee** (1956-), USA
This economist wrote a paper imagining what would happen to America's GDP if the world was flat and Christopher Columbus had fallen off of it.

THE MENTAL FLOSS 500

A HANDY GUIDE TO CREDIT WHERE CREDIT IS DUE

WHO GETS THE CREDIT? | WHO REALLY DESERVES IT?

Alexander Graham Bell

257 Elisha Gray

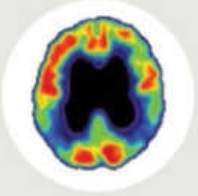
The Telephone
Hours before Gray issued an intent to file a patent, Bell applied for one. A patent office staffer swore in an affidavit that he'd been bribed to favor Bell's.

James Watson and Francis Crick

255 Rosalind Franklin

The DNA Double Helix
Franklin developed an X-ray technique allowing her to capture the first photos of DNA. A colleague showed her work to Watson and Crick without her knowledge and the pair published its Nobel Prize-winning articles.

Alois Alzheimer



253 S. Beljahow

The Discovery of Alzheimer's Disease
Alzheimer never claimed to discover the disease; he just presented a case in 1906 that became a common point of reference. But Beljahow had done similar research 15 years earlier.

Edmund Wilson

251 Nettie Stevens

Sex Chromosomes
In 1905, Stevens discovered that the X and Y chromosomes determined sex. Edmund Wilson discovered it that same year.

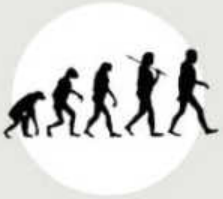
Thomas Edison

249 Charles Cros

The Phonograph
In April 1877, Cros cooked up the idea for a phonograph three months before Edison. Problem was, he dilly-dallied, and Edison built a prototype first.

WHO GETS THE CREDIT? | WHO REALLY DESERVES IT?

Charles Darwin



256 Alfred Russel Wallace

The Definitive Theory of Evolution
Darwin got there first, but Wallace deserves some credit. His ideas of natural selection in the 1850s pushed Darwin to publish *On the Origin of Species*.

Dmitri Mendeleev

254 Julius Lothar Meyer

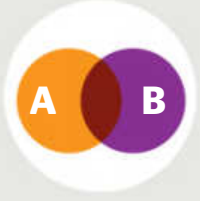
The Periodic Table
Meyer arranged 28 elements on a table by their atomic weights. Mendeleev would expand it, predicting the weights of several unknown elements.

Charles Babbage

252 Ada Lovelace

Computer Programming
Babbage is called the father of the computer for his 1837 "Analytical Engine," but Lovelace was the brains behind the computer's algorithm—the first in history.

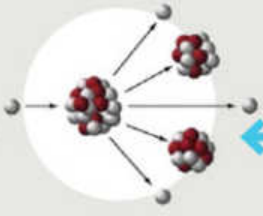
John Venn



250 Leonhard Euler

The Venn Diagram
Euler invented the Venn diagram nearly 100 years before Venn simplified and popularized it.

Otto Hahn



248 Lise Meitner

Nuclear Fission
Hahn was stumped when he first split the nucleus of an atom. He wrote to Meitner seeking help, and she (with the help of her nephew) wrote the theory of nuclear fission.

ISTOCK (TELEPHONE, PHONOGRAPH, COMPUTER, HAMILTON, SAXOPHONE)

247. **Lin-Manuel Miranda**
(1980-) USA
Arguably the most groundbreaking person to enter the Broadway theater ring since Jonathan Larson of *Rent*, he wrote the music, lyrics, and book for the new musical *Hamilton*. Oh, he stars in it too (and won a 2015 MacArthur genius grant).

246. **Bartolomé de las Casas**
(1484-1566), SPAIN
As the Spanish colonized the Americas, native cultures were destroyed. De las Casas fought for the humane, equal treatment of indigenous people, making him one of the first human rights advocates.

245. **Gudridur Thorbjarnardottir**
(10TH C.), ICELAND
The Spanish weren't the first to visit the Americas. In the 10th century, this Viking woman gave birth to the first European child on North America.

244. **Cecilia Payne-Gaposchkin**
(1900-1979), USA
Her 1925 PhD thesis suggested that stars were flaming balls of helium and hydrogen gas. She sent the study to Henry N. Russell, a Princeton professor, who dismissed the findings. Four years later, he took credit for the discovery.

243. **Susette La Flesche**
(1854-1903), OMAHA NATION
After the Ponca people were forcibly removed from their land in 1877, La Flesche testified before Congress. Her work led to the Dawes Act in 1887, which outlined land rights and made Native Americans citizens.

242. **Cleisthene**
(570-508 BCE), GREECE
Shout-out to Uncle Cleis, the father of democracy, for making government by the people possible!

241
DICK TUCK
(1924-), USA
The closest thing America has had to a court jester, Tuck was hired by JFK to repeatedly prank Richard Nixon. (One time, as Nixon spoke from a parked caboose, Tuck donned an engineer's cap and whistled for the train to leave.)

240. **Moms Mabley**
(1894-1975), USA
One of the first woman comics and a pioneer of black entertainment, Mabley was also once the country's top-earning actress, selling 1 million copies of her debut comedy album.

239. **Menander**
(342-291 BCE), GREECE
The original king of comedy, he was known for his "New Comedy"—humor that focused on ordinary people and daily life (think the *Seinfeld* of ancient Greece).

238. **Joseph Leidy**
(1823-1891), USA
In 1846, the paleontologist became the first person to solve a murder using a microscope. He examined blood on the shirt of the accused and determined it was human, not chicken blood, as the suspect claimed.

236. **Budai**
(10TH C.), CHINA
The Buddha was not portly, bald, or jolly. His name was Siddhartha Gautama, and he was incredibly thin—he fasted until near-starvation. The chubby, chuckling Buddha is Budai, a Chan monk widely cherished for loving life.

235. **Leo Africanus**
(1494-1554), SPAIN
The Moorish diplomat's book *Descriptions of Africa* was, for better and worse, Europe's main source of knowledge about the continent for 300 years, and may have even influenced *Othello*.

234. **King Tamar of Georgia**
(1160-1213), GEORGIA
The Georgians didn't have a word for *queen* by the time this boss-lady rose to power, so they dubbed her king instead.

233. **Emperor Norton**
(1818-1880), USA
A San Francisco eccentric, Norton declared himself America's emperor in 1859. He made his own money, which shops actually accepted. Nearly 30,000 people attended his funeral.

232. **David Johnson**
(1952-), USA
Johnson has spent more than 30 years hiding behind a bush on San Francisco's Fisherman's Wharf, scaring passersby. He makes $60,000 a year pretending to be a plant.

231. **L.L. Zamenhof**
(1859-1917), POLAND
He invented the Esperanto language so everyone could find common ground and end war. That didn't work, but the approximately 1.6 million speakers seem pretty peaceful.

230. **Saint John Coltrane**
(1926-1967), USA
A pioneer of hard bop jazz, the saxophonist was canonized by the African Orthodox Church. In San Francisco, you can worship at the Church of Saint John Coltrane.

229
KATE SCHELLENBACH
(1966-), USA
One of the original Beastie Boys wasn't a boy at all. She drummed with the Young Aborigines, a band that adopted the Beastie Boy alter ego as a way to blow off steam. When the joke band took off, they switched to hip-hop. Schellenbach left and kept playing rock.

228. **Victoria Woodhull**
(1838-1927), USA
Hillary Clinton is hardly the first woman to run for president. Woodhull ran in 1872—48 years before women could vote. She was a clairvoyant, a fortune-teller, and a magnetic healer—and she founded the first lady-owned brokerage on Wall Street.

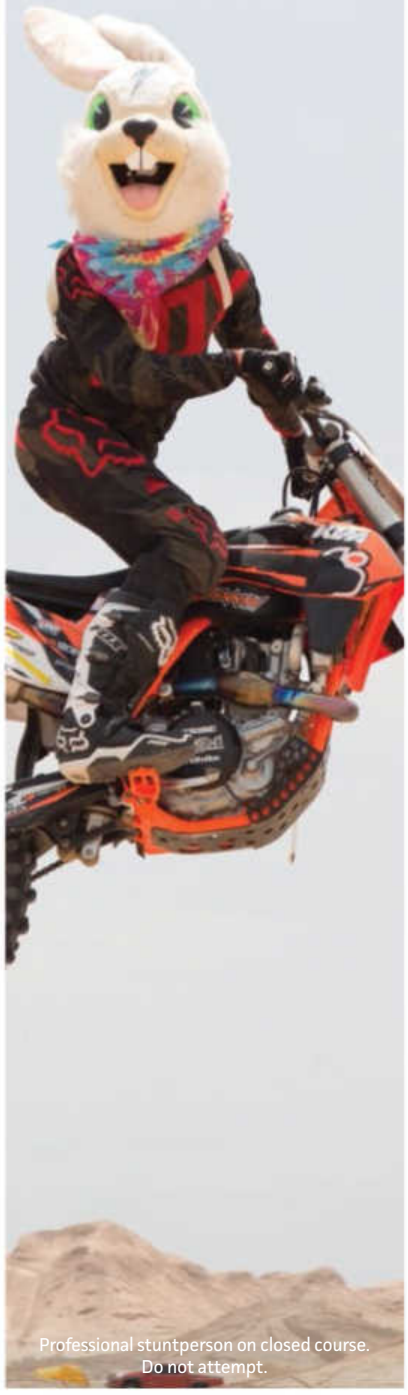
NO. 237

MARIE CURIE
(1867-1934), POLAND

A clever prankster, Curie once flipped a friend's room upside down by nailing his bed, table, and shoes to the ceiling.

ADVERTISEMENT

BOLD FACT No. 20857
BUILT IN 1885, THE FIRST MOTORCYCLE HAD WOODEN WHEELS WITH METAL RIMS AND TWO STABILIZING WHEELS (LIKE TRAINING WHEELS)!



Professional stuntperson on closed course. Do not attempt.

THE MENTAL FLOSS 500

NO. 220

THEODOR GEISEL

(1904-1991), USA

A student at Dartmouth during Prohibition, Geisel threw a drunken rager and was banned from the school's humor magazine. To keep publishing, he came up with a pen name: "Seuss." ("Dr." came later.)

227. **Sir Walter Raleigh**
(1554-1618), ENGLAND
After traveling to South America, Raleigh wrote about a tribe of headless people with eyes in their shoulders and mouths on their chests. "I am resolved it is true," he wrote—even though he'd never seen one of the monsters himself.

226. **Jean Eugène Robert-Houdin**
(1805-1871), FRANCE
Widely considered the father of "conjuring," he turned magic into upscale entertainment. Erich Weiss later took Houdin's name as part of his own stage name: Harry Houdini.

225. **Pete Conrad**
(1930-1999), THE MOON
While Neil Armstrong spoke poetry during their seven-and-a-half-hour stay on the moon, this 5-foot-6 astronaut cracked jokes: "Man, that may have been a small one for Neil, but that's a long one for me."

224. **Jerry Lawson**
(1940-2011), USA
One of the first two black members of Silicon Valley's Homebrew Computer Club, Lawson joined fellow "hobbyists" Steve Jobs and Wozniak. He developed the first cartridge-based video game console, the Channel F.

223. **Ian Channell**
(1932-), NEW ZEALAND
He's New Zealand's government-appointed wizard. (You read that correctly.) In 2009, Queen Elizabeth II awarded him the Queen's Service Medal.

222
ELIZABETH I

(1533-1603), ENGLAND
Queen, lover of gloves (she owned about 2,000 pairs), and inventor of the gingerbread man.

221. **Horace Emmett**
(19TH C.), ENGLAND
Not every weird idea is brilliant. In 1889, Dr. Emmett claimed he'd discovered the secret of eternal youth: ground-up squirrel testicles. He injected himself with an elixir daily and claimed he felt 30 years younger. And then he died.

219. **Teddy Roosevelt**
(1858-1919), USA
Guinea pigs were one of President Roosevelt's favorite pets. He named his pigs Fighting Bob Evans, Father O'Grady, and Admiral Dewey. He also had a bear named Jon Edwards. (Presumably a Democrat.)

218. **Nellie Bly**
(1864-1922), USA
The inspiration for Lois Lane, this reporter faked insanity to be committed in New York City's Blackwell's Island asylum. Afterward, she published a major exposé about the conditions there. Later, she reenacted Jules Verne's *Around the World in Eighty Days*—in only 72.

217. **Jon Batiste**
(1986-), USA
Bandleader of *The Late Show with Stephen Colbert*, the jazz pianist released his first CD at 17 and is artistic director-at-large at the National Jazz Museum. Oh, and he's not even 30.

216. **Lonnie Johnson**
(1949-), USA
This former NASA scientist patented a special air compression mechanism that led him to invent the Super Soaker.

215. **Ida Tarbell**
(1857-1944), USA
The mother of investigative journalism, she exposed John Rockefeller's monopoly, sparking the breakup of Standard Oil.

214. **John Peter Zenger**
(1697-1746), USA
In 1734, the printer and journalist was arrested after New York's governor sued him for libel. Zenger was found not guilty, the first case showing that truth was an absolute defense against libel. The freedom of America's press was established.

213
PAUL YOUNGER

(1962-), ENGLAND
In 2001, he found a way to clean polluted water leaking from Bolivia's mines: llama droppings. Bacteria absorb dangerous acid that could leak into the local drinking water supply.

212. **Anton Stepanov**
(C. 1985-), UKRAINE
The programmer helped develop a pair of "sign language interpretation gloves." As a person wearing the gloves signs, an app reads what they're saying.

211. **Prince Charles**
(1948-), ENGLAND
He owns an Aston Martin that runs on biofuel ... made from wine.

210-208. **Snap, Crackle, and Pop**
(1930-), USA
Do Rice Krispies by any other name taste as sweet? In Mexico, the characters are called "Pim, Pum, Pam." In South Africa, they go by "Knap, Knetter, Knak."

207-206. **Both George Harrisons**
(19TH C.), SOUTH AFRICA
(1943-2001), ENGLAND
In 1886, the prospector discovered a gold-bearing outcrop on a parcel of rocky land and sold it for $20. Bad idea. That parcel became Johannesburg, South Africa, the world's major exporter of gold and diamonds. (The *other* George Harrison found "Something.")

205. **Zora Neale Hurston**
(1891-1960), USA
The Harlem Renaissance folklorist traveled the Caribbean to

ILLUSTRATION BY BRANDON LOVING, ISTOCK (RABBIT)

ADVERTISEMENT

4x4
TACOMA
BOLD FACT No. 369
GEOPHAGY IS THE ACT OF EATING DIRT.
Professional drivers on closed course. Do not attempt. Prototype shown with options.

The Fiercest Princess

NO. 204
Khutulun
(1260-1306), Mongolia

In a lot of fairy tales, a disapproving father or a witch's curse stops the princess from finding Prince Charming. But things were a little different in 13th-century Mongolia. Any single lad could marry the khan's daughter, Khutulun, regardless of status or wealth. There was one caveat, which she herself decreed—you couldn't take her hand in marriage until you took her down in a wrestling match. If you lost, you had to give the princess a prize horse.

Sounds easy, right? Nope. After all, this is the great-great-granddaughter of Genghis Khan we're talking about! Over the years, Khutulun accumulated more than 10,000 prize horses from failed suitors. Though she did ultimately marry a man whom she *didn't* wrestle, she remained undefeated—for life.

8 People Who Contributed to Teddy Ruxpin, Bear of Singularity

Centuries of work culminated in one of the most delightful and creepy toys of the '80s. Here's how.

NO. 196
Villard de Honnecourt
(13TH C.), FRANCE
Inventor of animatronics, the core technology behind Teddy's searingly lifelike demeanor.

NO. 197
Lou Ottens
(20TH C.), NETHERLANDS
Led the team that invented cassette tapes (which Teddy accepted through the player in his rump, allowing him to spin his yarns).

NO. 198
Lee De Forest
(1873-1961), USA
Inventor of the amplifier (used by Teddy's speaker-box innards).

NO. 199
Al-Jazari
(1136-1206), TURKEY
Made the first humanoid automaton prototype using hydropower.

NO. 200
Peter L. Jensen
(1886-1961), USA
Inventor of speakers (a.k.a. Teddy's voice box).

NO. 201
Ken Forsse
(1936-2014), USA
The creator and benevolent god of Teddy Ruxpin.

NO. 202
Philip Baron
(1949-), USA
Voice of Teddy. His soothing, deliberate tenor can currently be heard at Valley Beth Shalom in Encino, California, where he is the cantor.

NO. 203
Morris Michtom
(1870-1938), USA
Having secured Theodore Roosevelt's blessing, this toy store owner dubbed a pair of stuffed animals he'd sewn "Teddy's bears," and the rest is history.

research voodoo and Haitian lore. Her work would introduce Americans to zombies.

195. **Felix Dennis**
(1947-2014), ENGLAND
The multimillionaire poet bequeathed the vast majority of his wealth to reforest 30,000 acres of English countryside. Dennis made his fortune owning magazines, including *mental_floss*. (He thought the name was ridiculous. But we digress.)

194
MARGRETHE II
(1940-), DENMARK
The Queen of Denmark also illustrated J.R.R. Tolkien's Danish edition of *The Lord of the Rings*.

193. **Franz Kafka**
(1883-1924), CZECH REPUBLIC
The writer got his creative juices flowing by exercising each day naked in front of the window.

192. **Nell Gwyn**
(17TH C.), ENGLAND
Once a prostitute, she worked her way from selling oranges at the theater to King Charles II's inner circle. Then she founded the first veteran's hospital.

191. **Margaret Hamilton**
(1936-), USA
The lead software engineer for the *Apollo* missions, she wrote the code that landed NASA on the moon when she was 32.

190. **David Chan**
(1948-), USA
Chan has eaten at nearly every Chinese restaurant in Los Angeles—and has a spreadsheet detailing all 7,000 establishments. (That's 17 percent of the country's Chinese places.)

189. **Playtex**
(1947-), USA
Everybody knows Neil Armstrong was the first person to step on the moon. Not everybody knows the spacesuit that kept him alive was designed by Playtex, the bra manufacturer.

188. **Sister Mary Kenneth Keller**
(1913-1985), USA
The first American woman to earn a PhD in computer science was, incidentally, a nun.

187. **Elena Lucrezia Cornaro Piscopia**
(1646-1684), ITALY
The first woman in history to receive a PhD—she got it in 1678!

186. **Akhenaten**
(14TH C. BCE), EGYPT
This Egyptian pharaoh was the

first ruler to test out monotheism, elevating the Sun God Aten above all others. It failed.

185. **Georges Lemaître**
(1894-1966), BELGIUM
The Big Bang and the theory of an expanding universe were first suggested by this physicist and priest.

184. **Ignaz Semmelweis**
(1818-1865), HUNGARY
Before Semmelweis, the father of medical hygiene, doctors didn't wash their hands or sterilize surgical instruments.

183
EVAN O'NEILL KANE
(1861-1932), USA
He proved anesthetics work ... by removing his own appendix.

182. **Noah Webster**
(1758-1843), USA
Do you argue with Brits over the spelling of *colour*? Thank this chap for reforming American spelling.

181. **Al-Mu'izz li-Din Allah**
(931-975), EGYPT
Angry that ink always stained his hands and clothes, the caliph ordered the invention of the fountain pen.

180. **William Holmes McGuffey**
(1800-1873), USA
He wrote the earliest grade-school textbooks, used from 1836 to 1960. Only the Bible and Webster's dictionary outsold him.

179. **D. Lynn Halpern**
(21ST C.), USA
Everybody hates fingernails on a chalkboard. Halpern, a scientist at Northwestern, discovered it's the low-to-middle frequencies (between 2,000 and 4,000 Hz) that make you cringe.

178. **Joshua ben Gamla**
(1ST C.), JUDEA
Smart kids, curse the name of ben Gamla, the father of compulsory education who made us attend school by age 6.

177. **James Howell**
(1594-1666), ENGLAND
The first person to make a living writing in English, he's the one who gave us, "All work and no play makes Jack a dull boy."

176. **Samuel Wilderspin**
(1791-1866), ENGLAND
This educator was an advocate for "structured play"—the idea that fun helps kids learn. (We knew that all along!)

175. **Kate Greenaway**
(1846-1901), ENGLAND
Raise a crayon to the illustrator of the first coloring book! It was such a novelty that it included instructions.

174. **Murasaki Shikibu**
(978-1014), JAPAN
Noblewoman Shikibu wrote *The Tale of Genji*—the world's oldest known full novel.

173. **The Average Indian**
(21ST C.), INDIA
People in India read more than anybody else in the world: 10 hours and 42 minutes a week. Americans, on the other hand, read for only 5 hours and 42 minutes. (We're honored if some of that time includes *mental_floss*.)

172. **Lady Allen of Hurtwood**
(1897-1976), ENGLAND
Three cheers for Lady Allen, who turned the humble playground into a global pastime.

171
MUHAMMAD
(570-632), SAUDI ARABIA
You know him as a prophet, but he was also a dentist's best friend. He promoted early toothbrushes, spreading the habit worldwide. Now, don't forget to floss.

12 COLLEGE MAJORS AND THE MAJOR ACADEMICS BEHIND THEM

170 Chemistry Someone had to transform alchemy into chemistry, and discover distillation, purification, evaporation, and filtration along the way. **Jabir Ibn Hayyan** was the man to do it. Emphasizing experimentation, he founded the chemistry we know today.

169 Historiography, Sociology, Economics
One guy invented all three: North African philosopher and *Muqaddimah* author **Ibn Khaldun.**

168 English Blame **Francis March,** who established the study of the English language, for your pretentious younger cousin who won't stop gabbing about Flaubert at Thanksgiving.

167 Pre-Med As the father of modern surgery, **Abu Al-Qasim Al-Zahrawi** wrote a pioneering 30-volume encyclopedia on medicine. Some of the instruments he invented are still used during surgeries today.

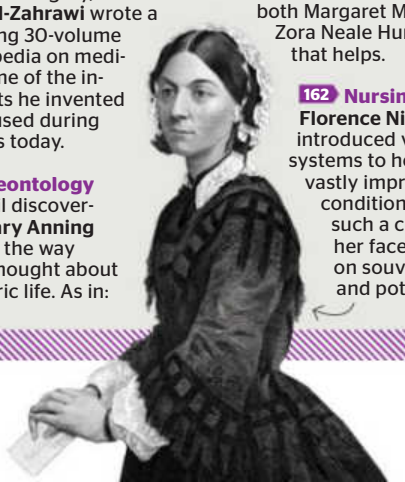
166 Paleontology
The fossil discoveries of **Mary Anning** changed the way people thought about prehistoric life. As in: It existed. She boosted the then-contentious idea that the earth was millions to billions of years old.

165 Linguistics As if sharing a name with a great sandwich weren't enough, **Panini** was a total grammar geek, giving us the earliest known work of descriptive linguistics.

164 Photography, Experimental Physics
The Greeks believed our eyes emitted rays, like lasers, to see. Mathematician **Ibn Alhazen** knew better, and invented the first camera obscura.

163 Anthropology
The father of modern anthropology—and, more importantly, the concept of cultural relativism—is a guy named **Franz Boaz.** He also taught both Margaret Mead and Zora Neale Hurston, so that helps.

162 Nursing
Florence Nightingale introduced ventilation systems to hospitals, vastly improving conditions. She was such a celebrity, her face appeared on souvenir bags and pottery.



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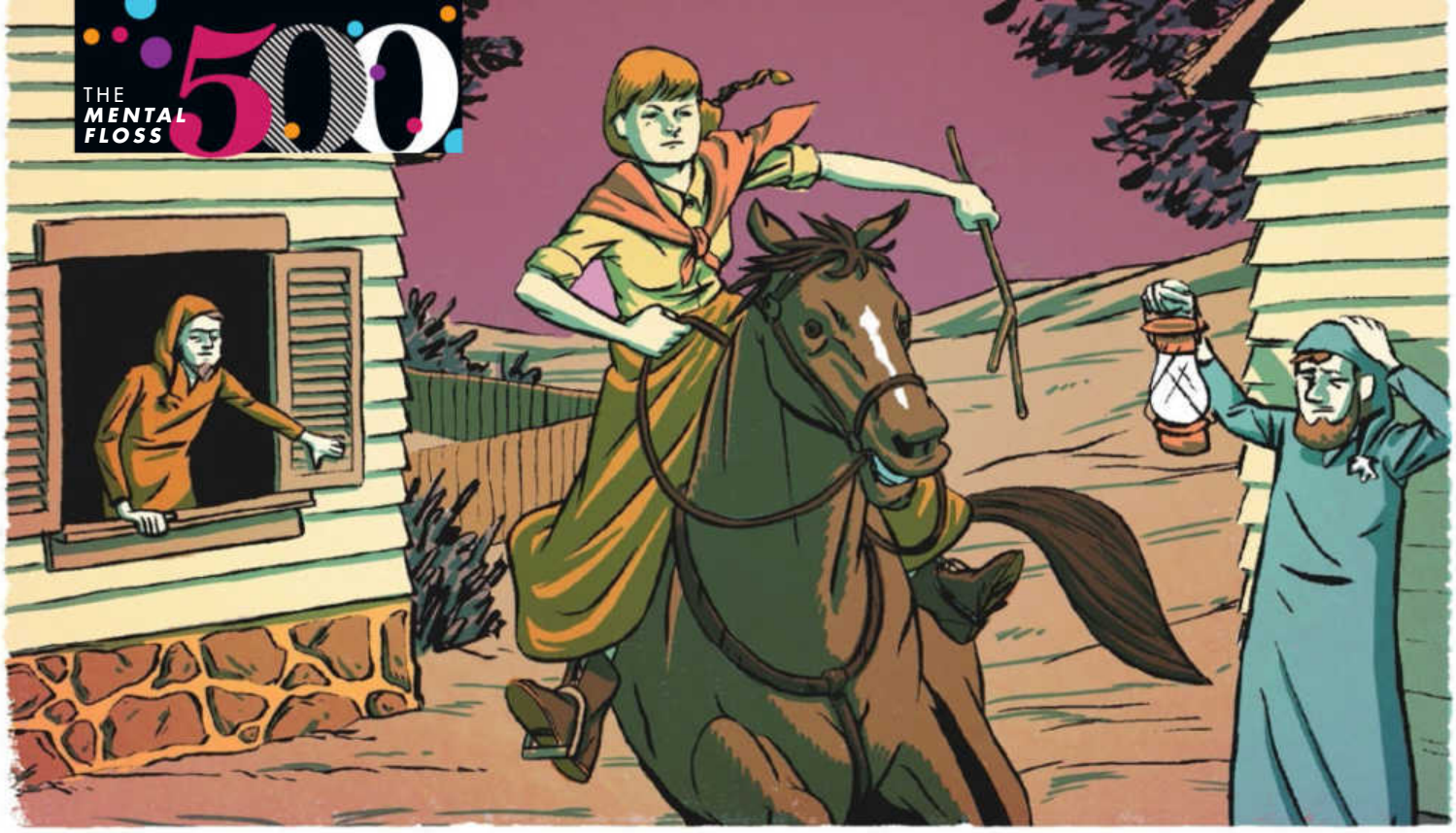
BOLD FACT No. 8924
THE "SNURFER" WAS THE FIRST MODERN SNOWBOARD. ITS NAME IS DERIVED FROM THE WORDS "SNOW" AND "SURFER."

Professional stuntperson. Do not attempt.

ISTOCK (PEN, CRAYONS, NIGHTINGALE)



The Teenage Paul Revere

NO. 161
Sybil Ludington
(1761-1839), USA

As if! To call her such is an insult: Sybil Ludington rode twice as far and, unlike Paul Revere, actually finished her ride. The 16-year-old's father was a colonel serving the Revolutionary cause when, in April 1777, British soldiers marched on Danbury, Connecticut, sacking and burning storehouses and homes. A messenger begged Ludington's father for reinforcements, but his militiamen were home at their farms. So, at 9 p.m., the teenager rode off into the rainy night, bolting through dark woods to alert fellow revolutionaries. She yelled warnings, banging on doors and windows with a stick. Dodging British loyalists and outlaws, she covered 40 miles over the course of the night. The militia she assembled arrived too late to save Danbury, but thanks to Ludington, it did chase the British back to their ships. Later, the teenager received a commendation from General George Washington. (Oh, and America won the war!)

ILLUSTRATION BY GARY MUSGRAVE

ADVERTISEMENT

BOLD FACT No. 16897
THERE ARE PARTS OF THE ATACAMA DESERT IN CHILE WHERE NO RAIN HAS EVER BEEN RECORDED.
Professional drivers on closed course. Do not attempt. Prototypes shown with options.

160. **Oscar Hammerstein II**
(1895-1960), USA
The only person named Oscar to ever actually win an Oscar.

159. **Bette Davis**
(1908-1989), USA
The actress claimed that Academy Award statues are called Oscars because the statue's butt resembled that of her first husband, whose middle name was Oscar. (In truth, it's probably named after Academy librarian Margaret Herrick's uncle, also Oscar.)

158. **Rene Descartes**
(1596-1650), FRANCE
The philosopher wasn't ashamed to admit he had an unusual fetish: cross-eyed women. "When I saw a cross-eyed woman, I was more prone to love her than any other," he wrote in 1647.

157. **Vyasa**
(C. 3000 BCE), INDIA
Vyasa gets credit for writing the world's longest poem, the epic *Mahabharata*. Not only is it seven times longer than Homer's *Odyssey* and *Iliad* combined, it's also the bedrock of Hinduism.

156. **Paul Cézanne**
(1839-1906), FRANCE
To keep his confidence up, Cézanne trained his pet parrot to say, "Cézanne is a great painter." He'd then point to the bird and say, "That's my art critic!"

155
VIRGIL
(70 BCE-19 BCE), ITALY
The poet reportedly had a pet fly. When the bug croaked, Virgil held a lavish funeral and hired an orchestra and mourners to weep. He'd later build a special mausoleum for the housefly and write verse for it. (Virgil wasn't crazy—he may have used the tomb as an excuse to keep the government from taking his land.)

154. **Diamond the Dog**
(C. 1690), ENGLAND
Isaac Newton's pup changed the world for all the wrong reasons. As one story goes, the dog knocked over a candle, causing a fire that destroyed 20 years' worth of calculations. Newton was despondent. "O Diamond! Diamond! thou little knowest the mischief thou hast done!"

153. **The Japanese Tree Frog**
JAPAN
Female Japanese tree frogs can't tell the difference between one male frog croaking over the other. So, amazingly, the courting guys trade off, ensuring they never sing over one another. That behavior inspired computer scientists in Spain to develop algorithms that make wireless networks more efficient.

151. **Hennig Brand**
(C. 1630-1692), GERMANY
In the 17th century, alchemists were so desperate to make gold that Brand resorted to boiling urine. Gold it did not make, but it did yield a white paste that glowed in the dark: phosphorus. People called it the "miraculous bearer of light." Later, it would be developed to make the first matches.

150. **Isidore of Seville**
(560-636), SPAIN
Isidore is the patron saint of the Internet for a reason. He wrote 20 books called "Etymologies," in which he tried to record every piece of human knowledge ever known. We assume he was really good at Dark Ages Trivial Pursuit.

NO. 152
JAVIER MORALES
(20TH C.), MEXICO

In 2008, Morales took evaporated tequila, heated it to 1,400 degrees, and deposited it on a silicon substrate. The result? Pure diamonds.

149. ¯_(ツ)_/¯
(2010-), JAPAN
Whether you can't handle the comments section or just watched a YouTube video that left you questioning the fate of humanity, Shruggie is there for you.

148. **Russell Dohner**
(1925-2015), USA
An Illinois doctor for 58 years, Dohner worked seven days a week and charged patients only $5 per checkup. "I really never thought about being in it for money," he told the BBC in 2012. "It's to take care of people."

147. **Ian Humphreys**
(21ST C.), USA
Around 2011, a 4-year-old girl with a rare disorder visited the Children's Hospital of Michigan with an uncontrollable, life-threatening nosebleed. Doctors tried everything, but her nose kept bleeding until Humphreys stuffed a few strips of cured pork up her nose as a last resort. (Nasal pork tampons create swelling that stops bleeding.)

146. **Henry Darger**
(1892-1973), USA
After Darger, a humble hospital custodian, died, his landlord discovered a 15,145-page, single-spaced fantasy manuscript in his Chicago apartment. His magnum opus had taken six decades to complete and gained a cult following.

145. **Dolly Parton**
(1946-), USA
Dolly the sheep, the first animal cloned from an adult cell, was named after the famous bust of the actress, businesswoman, country singer-songwriter, and humanitarian. "Dolly is derived from a mammary gland cell and we couldn't think of a more impressive pair of glands than Dolly Parton's," explained Ian Wilmut, the project's lead scientist.

144. **Stanley Kubrick**
(1928-1999), USA
In the early 1940s, before he was a world-famous film director, he supplemented his income by playing chess in New York City's Washington Square Park. Kubrick loved the game so much that, while filming *The Shining*, he supposedly canceled a whole

ISTOCK (MATCHES)

day of shooting to finish a match.

143. **The Turk**
(1770-1854), EUROPE
A chess-playing robot that resembled those fortune-telling automatons at the pier, the Turk beat everybody from Ben Franklin to Napoleon. Its secret? Being a hoax. The Turk was controlled by a skilled chess player hiding inside.

142
ALAN GREENSPAN
(1926-), USA
Before becoming chairman of the Federal Reserve, Greenspan played sax and clarinet in Greenwich Village's jazz clubs. (He studied at the prestigious Juilliard School.)

141. **Mike Reid**
(1947-), USA
The No. 7 NFL draft pick in 1970 moonlighted as a symphony pianist and co-wrote Bonnie Raitt's classic "I Can't Make You Love Me."

140. **Nadia Boulanger**
(1887-1979), FRANCE
Aaron Copland. Philip Glass. Quincy Jones. Elliott Carter. All of them studied under Boulanger, the world's greatest music teacher. Hundreds of her students became world-class professionals.

139. **Johnny Cash**
(1932-2003), USA
His estate once refused permission for his hit "Ring of Fire" to be used in a commercial for hemorrhoid cream.

138. **Shel Silverstein**
(1930-1999), USA
Silverstein wrote Cash's "A Boy Named Sue." Before writing children's literature (which he hated, by the way), Silverstein was a cartoonist for *Playboy*.

137. **Michelangelo**
(1475-1564), ITALY
Michelangelo's father was terrified when his son chose art as a career. (Some things never change!) The Sistine Chapel painter didn't first taste fame as an artist, but as an art forger. He made a statue, buried it, and claimed it was ancient so he could sell it at a higher price.

136. **Jon Bon Jovi**
(1962-), USA
Before his musical blaze of glory, the crafty John F. Bongiovi Jr. made Christmas decorations for a living.

135. **Fred Smith**
(1944-), USA
As a student at Yale, Smith cooked up the idea of an overnight delivery service. His professor was not impressed. "The concept is interesting and well-formed, but in order to earn better than a C, the idea must be feasible," he wrote. Smith would go on to found FedEx.

134. **Fu Xi**
(13TH C. BCE), CHINA
Responsible for every yin-yang tattoo in existence, he authored the *I Ching*, a foundational text that included one of the earliest attempts to explain cosmology. At least, he supposedly did—chances are Fu Xi was simply a legend.

133. **Patricia Bath**
(1942-), USA
The Harlem native developed laser devices that dissolve cataracts, allowing people who'd been blind for decades to see again.

15 Geniuses Under 17

Harry Potter, meet your match.

132 **The Patriot Designer**
Robert Heft is often credited with designing the layout of the 50-starred American flag—the one we still use today—for a school project in 1958. He received a B-, but his history teacher eventually made good on his promise to change the grade to an A if the design of seven staggered rows were selected.

131 **The Inventor of Hip-Hop**
Clive Campbell, a.k.a. DJ Kool Herc, was only 17 when he invented the entire genre of hip-hop in the Bronx in 1973 by mixing isolated beats with funk and soul albums. He also spawned a new genre of dance when he dubbed his dancers "b-boys"—for break-dancers.

130 **The Molecular Chemistry Pioneer**
Clara Lazen was in her fifth-grade class a few years ago, using ball-and-stick models to visualize molecules. The 10-year-old from Kansas City put the carbon, nitrogen, and oxygen atoms together in a complex way. She asked her teacher if she had made a real molecule, but he wasn't sure. It turned out Clara discovered a new one: tetranitratoxycarbon.

129 **The Ceiling-Breaking CEO**
Sindhuja Rajaraman was 14 when she became the youngest CEO in India. What's amazing isn't just that she assumed her title at 14; it's that she did it in a country where companies run by women account for just 3 percent of the GDP. Now 18, she runs the computer animation company Seppan Entertainment.

128 **The Green Energy Activist**
William Kamkwamba was 14 when he finished reading a library book on generating energy, then put its principles to work at his family home in Malawi in 2002, building power-producing windmills out of scraps like broken bicycles. Soon, he was providing solar-powered energy and water pumps to his entire village.

127 **The Math Genius**
Kim Ung-Yong once held the record of the world's highest IQ (210). The Seoul native was such a sharp cookie, NASA invited him to work for them—when he was 8 years old. When he turned 18, he quit his job (at NASA) to go to college in 1978.

126 **The Medical Diagnostic Pioneer**
Brittany Wenger developed and programmed a minimally invasive test in 2012 that can detect breast cancer—with 99.11 percent accuracy—at 17. Needless to say, she won the science fair. The Google Science Fair.

125 **The Human Rights Activist**
Gregory R. Smith was 12 when he got nominated by the Nobel Peace Prize committee in 2002, for his advocacy work on behalf of child victims of war, violence, and poverty. That was just the first time. Smith went on to rack up three more nominations before turning 20.

124 **The Graduate**
Michael Kearney got his degree at 10, and went on to earn a total of four—in anthropology, computer science, geology, and chemistry—by the time he was 21. (Bonus: He was on *Who Wants to Be a Millionaire?* in 2008).

123 **The Peace Activist**
Samantha Smith wrote, "Are you going to vote to have a war or not?" to then-Soviet Premier Yuri Andropov, a move that famously

ILLUSTRATION BY CARMEN SEGOVIA. ISTOCK (YIN YANG SYMBOL)

helped ease Cold War tensions after the letter was published in the USSR Communist newspaper *Pravda*. She was 10. When she was tragically killed in a plane crash in 1985 at 13, her mother received personal letters of condolence from both Ronald Reagan and Mikhail Gorbachev.

122 **The Linguistics Expert**
Jean-François Champollion spoke eight languages by the time he was 16; by 19, he was a history professor at the Lycée de Grenoble. During the early 19th century, his expertise came in handy when translating the Rosetta Stone.

121 **The Novelist**
Nancy Yi Fan was 12 when she penned *Swordbird* as a way of working through her feelings on 9/11. The work of the Syracuse, New York–based tween became a *New York Times* bestseller.

120 **The Chess Prodigy**
Rochelle Ballantyne played Garry Kasparov, then the world's greatest chess player, in 2008. She lost, but of the 19 players Kasparov beat in the tournament, the then-13-year-old Brooklynite was his toughest opponent.

119 **The Harvard Freshman**
William James Sidis became the youngest person to enroll in the university in 1909, at age 11. His thoughtfulness went beyond the scholarly: A conscientious objector to the draft in the first World War, he left the League of Nations because President Woodrow Wilson wouldn't withdraw troops.

118 **The Number Cruncher**
Shakuntala Devi, a.k.a. the human computer, was a certifiable mathematical genius by the age of 5, and supported her family counting cards during gambling games with her father in 1930s India. She went on to beat a UNIVAC computer at calculating numerical roots as an adult, and set a world record by multiplying two 13-digit numbers in 28 seconds.

ADVERTISEMENT

BOLD FACT No. 36578
THE COLDEST LAKE IN THE WORLD IS CALLED LAKE VOSTOK—IT'S FOUR KILOMETERS BELOW ANTARCTICA'S ICY SURFACE.

Professional stuntperson on closed course.
Do not attempt. Prototype shown with options.

THE MENTAL FLOSS 500

NO. 117

MEKATILILI WA MENZA

(C. 1850-1914), KENYA

As Europeans colonized East Africa, Menza rebelled in the grooviest way possible: with dance. Dancing from village to village, she attracted crowds that drove the colonists out of town.

116. **Usain Bolt**
(1986-), JAMAICA
During the 2008 Beijing Summer Olympics, Bolt won three gold medals and set a world record in the 100-meter dash. His game fuel? Chicken nuggets. He ate approximately 100 a day while competing.

115
POPEYE
(1929-), USA
Our inspiration for going to the gym, Popeye originally got his strength from rubbing a magic hen named Bernice.

114. **Erich von Wolf**
(19TH C.), GERMANY
Why did Popeye switch to spinach? In 1870, von Wolf tested the amount of iron in leafy greens. While doing the math, he misplaced a decimal point, accidentally making spinach sound like a muscle-building superfood.

113. **Barbara McClintock**
(1902-1992), USA
This Nobel-winning geneticist discovered that genes are capable of moving between chromosomes. A wild discovery for the time, it suggested that your genome isn't set in stone, and can be rearranged.

112. **Marie Dacke**
(21ST C.), SWEDEN
Until 2013, scientists believed that only humans, birds, and seals used stars to navigate. But in 2013, Dacke's team learned that, when the moon isn't visible, dung beetles use the Milky Way to navigate back home.

111. **Karina Acevedo-Whitehouse**
(21ST C.), ENGLAND
One of the best ways to learn about an animal's health is to look at the bacteria in its snot. As you can imagine, it's dangerous to obtain such samples from whales. The scientist perfected a method of collecting whale mucus by using a remote-controlled helicopter. The drone hovers over blowholes and waits for the whale to sneeze, capturing the result in petri dishes.

110. **Sascha Usenko**
(21ST C.), USA
Whale earwax can unlock clues about the ocean too. The wax is like a time capsule that, over years, collects pollutants, hormones, and pesticides present in the water. Usenko collects and dissects it to study how much the sea has changed.

109. **Horace Greeley Johnson**
(19TH C.), CANADA
The "Edison of underwear," Johnson invented the "Kenosha Klosed Krotch" union suit, a onesie with an opening in the back to make way for, um, important business.

108. **Yvan Mayeur**
(1960-), BELGIUM
Brussels, in case you didn't hear, has an underpants museum. (OK, it's in a bar.) In 2014, somebody stole a pair of underpants signed, and once owned by, the city's mayor, Mayeur.

107. **Calvin Klein**
(1942-), USA
Jaguars are more obsessed with Klein's cologne *Obsession for Men* than humans are. Researchers use the scent to attract big cats toward game cameras.

106. **Snowball**
(1935-1950), USA
The first six-toed cat Ernest Hemingway owned, Snowball would be joined by dozens more. Hemingway had more than 50 felines, making him literature's most prolific cat hoarder.

105. **Princess Enheduanna**
(2285-2250 BCE), SUMERIA
The world's first known author and poet, the Sumerian writer used both the third- and first-person perspectives—a literary breakthrough not reproduced for almost 2,000 years.

103. **Mayu Yamamoto**
(21ST C.), JAPAN
Extracting natural vanillin from vanilla beans is expensive. But in 2006, Yamamoto discovered a way to harness vanilla flavoring that costs half as much: extracting it from cow dung.

102. **Christine de Pizan**
(1364-1430), ITALY
She wrote the first feminist listicle, *The Book of the City of Ladies*, in which she compiled the great women who came before her, from Dido to the Queen of Sheba. We figured it was time to return the favor.

101. **Robert Shields**
(1918-2007), USA
The greatest diarist of all-time, Shields makes Samuel Pepys look like a hack. His 37.5-million-word diary, the world's longest, chronicles every five minutes of his life from 1972 to 1997.

100. **Ben Wilson**
(21ST C.), CANADA
Around 2003, the Swedish Navy was worried about strange sounds it heard in the water. Afraid of Russian submarines, it called upon Wilson's team to investigate. Turns out the sounds

Animal Instinct

NO. 104
Jack the Baboon
(c. 1870-1890), South Africa

One day in the 1880s, a peg-legged railway signalman named James Edwin Wide was visiting a buzzing South African market when he witnessed something surreal: a Chacma baboon driving an oxcart. Impressed by the primate's skills, Wide bought him, named him Jack, and made him his personal assistant. Years earlier, Wide had lost his legs after falling under a train, which made his half-mile commute to the train station difficult. So he trained the primate to push him to and from work in a small trolley, as well as to help with household chores, like sweeping the floor and taking out the trash.

But the signal box is where Jack truly shined. As trains approached the station where Wide worked, they'd toot their whistle, which alerts the signalman to change the tracks. By watching his owner work, Jack picked up the pattern and started changing the tracks himself. One day, a posh passenger saw the baboon manning the gears, panicked, and complained to authorities. The railway managers promptly tested his abilities—and were astounded. "Jack knows the signal whistle as well as I do, also every one of the levers," said railway superintendent George B. Howe. Jack was given an official employment number, and was paid 20 cents a day and half a bottle of beer weekly. He worked the rails for nine years without once making a mistake, reminding us that perfectionism is not just a human condition.

ISTOCK (UNDERPANTS, HERRING)

were coming from herrings. The scientists discovered that the fish communicate by farting.

99. **William McGonagall**
(1825-1902), SCOTLAND
Considered the worst poet in English literature, McGonagall was undeterred by criticism. He capitalized on his infamy by performing at venues where the audience could throw food at him.

98. **Arthur Conan Doyle**
(1859-1930), ENGLAND
The author of *Sherlock Holmes* was also an ophthalmologist. He never saw a single patient, though, making him the laziest polymath of all time.

97. **Victor Goulet**
(20TH C.), AUSTRALIA
An Australian dancer, Goulet broke his Achilles tendon during a 1907 performance. Doctors restored his career by replacing it with the tendon of a wallaby.

96. **Aphra Behn**
(1640-1689), ENGLAND
This spy-turned-playwright proved women could be full-time writers. She tackled topics from slavery to impotence, leading Virginia Woolf to write that Behn earned women the "right to speak their minds." Critics regard her work as instrumental to the development of the novel.

95. **Hans Christian Andersen**
(1805-1875), DENMARK
The author of classics like *The Little Mermaid* was afraid of being buried alive. So afraid, actually, that he'd put a note by his bed saying, "I only appear to be dead."

94
LAL BIHARI
(1955-1975, 1994-), INDIA
In 1975, Bihari tried to apply for a bank loan, but it was denied because, according to the government, he was legally dead. And once the government decides you're dead, proving you're alive is pretty tough. It took Bihari 19 years fighting Indian bureaucracy to prove that he was, in fact, still breathing. He's since created the Association of Dead People to help others with the same problem.

ILLUSTRATION BY BRANDON LOVING

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BOLD FACT No. 14582
THE FIRST BICYCLE WAS PATENTED IN 1818 AND WAS CALLED A VELOCIPEDE.

Professional stuntperson.
Do not attempt.

93. **Lady Hester Stanhope**
(1776-1839), ENGLAND
This rebellious English socialite conducted the first archaeological dig in Palestine in 1815. Bedouin tribes were so impressed they called her "Queen of the Desert." History remembers her as the first Holy Land archaeologist.

92. **Christopher Monck**
(1653-1688), ENGLAND
The English duke organized the first modern boxing match in 1681, pitting his butler against his butcher. (The butcher won.)

91-90 GRANPREE AND LE PIQUE
(19TH C.), FRANCE
In 1808, two men feuded over the love of a dancer by dueling 3,000 feet over Paris in balloons with blunderbusses (an early shotgun that resembled an overweight clarinet). Badass.

89. **Frank Conrad**
(1874-1941), USA
Sports broadcasting was effectively born in 1921 when the station Conrad founded and managed—KDKA in Pittsburgh—delivered play-by-play coverage on a pro boxing match.

88. **Marian Anderson**
(1897-1993), USA
In 1939, the black contralto was forbidden from singing before an integrated audience at a venue owned by the Daughters of the American Revolution. In protest, Eleanor Roosevelt organized an open-air concert for Anderson at the Lincoln Memorial: 75,000 people attended.

87. **Alfred Barr**
(1902-1981), USA
A "museum" for modern art was once considered an oxymoron. Then Barr, the first director of the Museum of Modern Art, exalted the offbeat styles of Picasso, van Gogh, and the Bauhaus school.

86. **Rodolphe Töpffer**
(1799-1846), SWITZERLAND
Spider-Man, pay homage. Töpffer wrote picture books to entertain his friends, but Johann Wolfgang von Goethe insisted he publish. "The Adventures of Mr. Obadiah Oldbuck" would be the world's first comic book.

85. **Mark Inglis**
(1958-), NEW ZEALAND
In 2006, Inglis climbed Mount Everest ... despite having no legs. One prosthesis snapped in half at 21,000 feet, but he still made it to the top.

84. **Amerigo Vespucci**
(1454-1512), ITALY
The explorer was incorrectly credited with discovering South America. In 1507, a cartographer created a map of the New World and named the landmasses after Vespucci—hence the name America.

83. **Homer Simpson**
(C. 1956-), USA
IQ doesn't mean everything. As a nuclear safety inspector, Simpson makes $20,000 more than the average American.

82. **Tim Pppppppppprice**
(C. 1963-), ENGLAND
That's not a typo. Pppppppppprice changed the spelling of his name to deter telemarketers.

81. **Mercedes Márquez**
(1932-), COLOMBIA
The cornerstone of Gabriel García Márquez's work, his wife of 56 years put a yellow rose on his desk every day.

80 JAMES FALLON
(1947-), USA
In 2006, Fallon, a neuroscientist, was studying the brain scans of psychopathic murderers. He used his own brain scan as a control, but quickly discovered something unexpected: He, too, was a psychopath.

79. **Ray Tomlinson**
(1941-), USA
When Samuel Morse sent the first telegraph, he wrote, "What hath God wrought?" Beautiful! In 1971, Tomlinson sent the first email, which read—well, its creator doesn't remember, calling its text "completely forgettable."

78. **Gary Thuerk**
(1943-), USA
Without Thuerk, inventor of email spam, where would you get the Vicodin that's shipping! today! for a special price?

77. **Stephan Bolliger**
(21ST C.), SWITZERLAND
What's worse: getting hit in the head with an empty beer bottle, or a full beer bottle? Bolliger conducted a study and found that, apparently, getting hit in the head with either is a terrible experience. (Empties are worse.)

76. **Ann Druyan**
(1949-), USA
Co-creator of the original *Cosmos* TV series, Druyan can thank the universe for helping her meet her future husband, Carl Sagan.

75. **The Average American Man in 1820**
(C. 1798-C. 1836), USA
In the early 19th century, Americans drank whiskey for breakfast, lunch, and dinner. In fact, the average American man downed half a pint a day.

74. **Rusty Haight**
(1960-), USA
A professional crash test dummy, Haight has survived more than 1,000 collisions.

73. **Chewbacca**
(A LONG TIME AGO), A GALAXY FAR, FAR AWAY
While shooting *Star Wars* in the Pacific Northwest, Peter Mayhew,

5 People Who Were Basically Indiana Jones

72 **The Guy Who First Identified Dinosaur Egg Fossils** Some of the narrower brushes of **Roy Chapman Andrews** (1884-1960): "Once we were in great danger from fanatical lama priests, two were close calls when I fell over cliffs, once was nearly caught by a huge python, and twice I might have been killed by bandits," he wrote. (And like Indy, the American hated snakes.)

71 **The Guy Who Discovered Machu Picchu** The tales of trekking Peru told by Yale lecturer **Hiram Bingham III** (1875-1956) inspired Charlton Heston's *Secret of the Incas*, in which an American treasure hunter dons a fedora and leather jacket—the same getup used by the Indiana Jones costume team.

70 **The Guy Who Got Lost Searching for a Lost City** In 1925, British archaeologist **Percy Fawcett** (1867-1925) was swallowed by the deepest regions of the Amazon while searching for a legendary city he dubbed "Z."

69 **The Guy Who Was After the Holy Grail** German researcher **Otto Rahn** (1904-1939) was so assured of the Grail's existence, Hitler's SS commissioned him to search for it. "What was I supposed to do? Turn Himmler down?" Rahn told friends. He later rejected helping the Nazis and resigned.

68 **The Guy Who Became a Pirate Treasure-Hunting Honorary Mexican Outlaw** His 1954 memoirs are titled *Danger, My Ally*. He was a spy prisoner of Pancho Villa who eventually joined Villa's gang of Mexican outlaws. He sought forgotten empires, found a crystal skull, went toe-to-toe with jaguars, uncovered Mayan ruins, documented cannibal rites, and dug up buried treasure. So, yeah: **F.A. Mitchell-Hedges** (1882-1959) was the real deal.

ALAMY (INDIANA JONES, CHEWBACCA)

who played Chewbacca, was accompanied by bodyguards to protect him from Bigfoot hunters.

67. **Ron Dubren**
(1943-), USA
In 1995, *Sesame Street* was low on funds and on the verge of being sold. But then Dubren had the idea for Tickle-Me-Elmo, launching a toy craze that, at its height, led to a black market for Elmo dolls. The boost in revenue arguably saved *Sesame Street*.

66. **John Creasey**
(1908-1973), ENGLAND
If rejection ever gets you down, just remember that this novelist received 743 rejection slips for his books. (That said, he also published 564 novels in just 40 years.)

65-54. **Australia's First Police Force**
(C. 1789), AUSTRALIA
In 1789, Australia was one big British penal colony. Governor Arthur Phillip wanted to assemble a police force, but pickings were slim. So he gave the job to 12 of the colony's best-behaved convicts.

53. **The Lego Professor at Cambridge**
(2015-), ENGLAND
This October, the University of Cambridge established a "LEGO Professor of Play in Education, Development." Dream job?

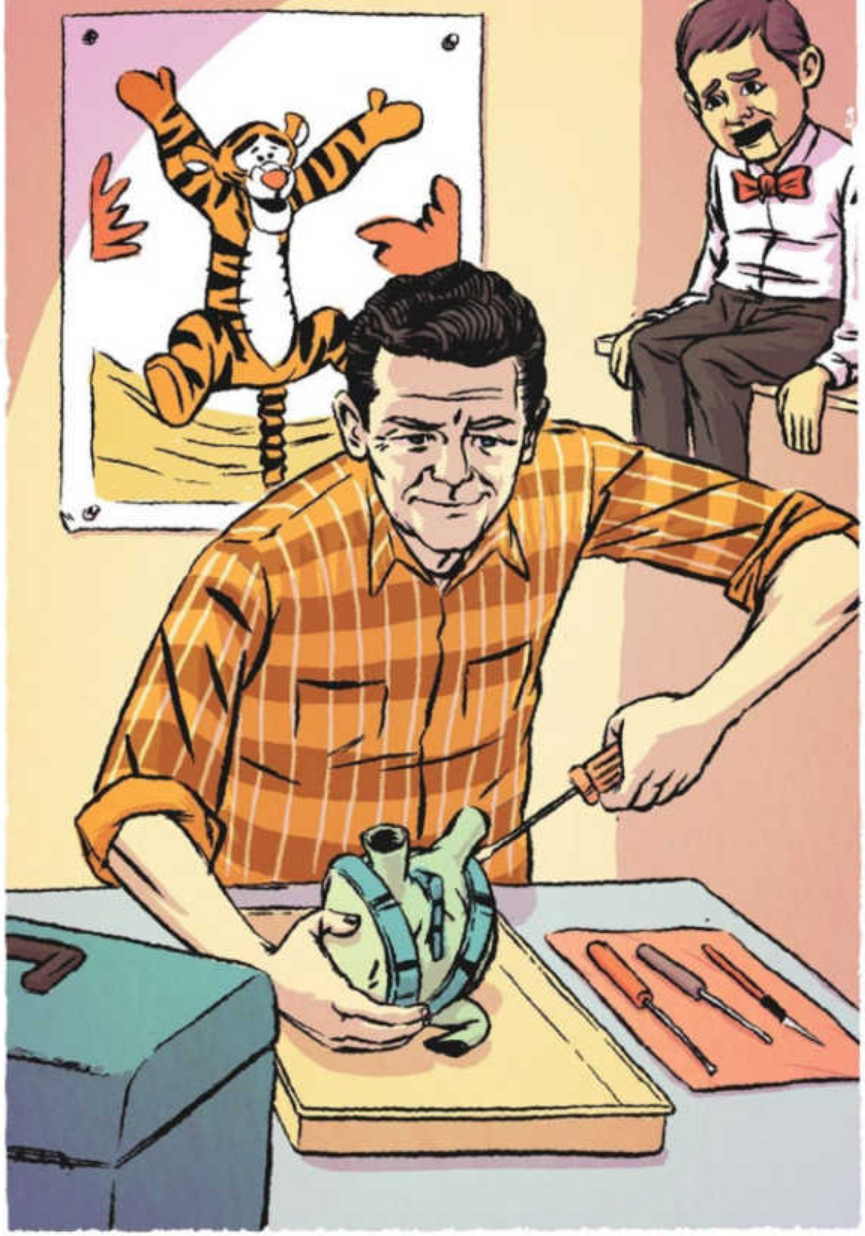
52. **Niels Bohr**
(1885-1962), DENMARK
Bohr is a hero to many for winning the 1922 Nobel Prize in physics for his work determining the structure of atoms. He's a hero to others for the gift he later received: a perpetual supply of free beer piped from the Carlsberg brewery into his home.

50. **Joseph Priestley**
(1733-1804), ENGLAND
Beer helped Priestley discover oxygen. He started his world-changing experiments after noticing gas rise from vats of suds at a brewery.

49. **Eva Ekeblad**
(1724-1786), SWEDEN
By discovering that potatoes could be turned into flour, Ekeblad helped Sweden avoid famine. Also, she invented potato vodka!

48. **William Henry Perkin**
(1838-1907), ENGLAND
The chemist was trying to turn coal tar into quinine when the tar turned a brilliant purple. At the time, people could get purple dye only by crushing exotic snails, but Perkin's discovery made it accessible to common folks. It made him so rich, he retired at age 36.

47. **Frank Welker**
(1946-), USA
Welker is the highest-grossing actor of all time ... and you've probably never heard of him. He's done voice-overs for more than 40 years, lending his pipes to Garfield, Batman, Megatron, and both Fred and Scooby-Doo.



The Life-Saving Ventriloquist

NO. 51
Paul Winchell
(1922-2005), USA

As a kid, Paul Winchell had a noticeable stutter. He took up ventriloquism as a treatment, and not only did the craft fix the impediment, it turned out to be a crafty career move. Winchell became a renowned ventriloquist, and went on to voice beloved cartoon characters, including *Winnie the Pooh*'s Tigger. That success allowed him to pursue passions beyond the mic—and he had many. Over the years he built careers as an acupuncturist, hypnotist, and inventor. Ultimately, he held 30 patents, including those for a disposable razor, a flameless cigarette lighter, an invisible garter belt, battery-heated gloves, and, most significantly, an artificial heart. His design was critical to the first implants in the early 1980s (which, incidentally, Winchell developed with Henry Heimlich, of the maneuver). One of the patients who received it even broke the survival record at the time. By learning to throw his voice, Winchell not only creatively threw off adversity, he saved lives. All it took was a little heart.

46
MANI
(216-276), IRAN
He founded Manicheanism, a Neapolitan ice cream of religion that mixed Christian, Zoroastrian, and Buddhist principles. It spread from Rome to China before vanishing around 1000 AD.

45. **Laura Bridgman**
(1829-1889), USA
At 24 months old, she lost her senses of sight, hearing, and smell. She was considered a lost cause. But in 1937, Dr. Samuel Howe at the Perkins School for the Blind

ILLUSTRATION BY GARY MUSGRAVE

ADVERTISEMENT

BOLD FACT No. 458

UNDERNEATH THE STRIPED FUR OF A TIGER IS STRIPED SKIN (WHICH PRESERVES THE CAMOUFLAGE EFFECT).

Prototype shown with options.

THE MENTAL FLOSS 500

27 Overachieving Overachievers

You can be good at one thing ... but what about everything?

44 **The Rocket Science Rock Star** Queen lead guitarist **Brian May** ditched his PhD studies in 1970 to join the band, but finished his degree 37 years later, wrote his thesis on reflected light from interplanetary dust, co-authored two books on the subject, and, in 2008, had an asteroid named after him.

43 **The Bookiest Ancient** One of the first women to study math and philosophy, **Hypatia** was one of the last people with a library card to the famed Library of Alexandria. Her death marked the end of classical antiquity.

42 **The Realest McCoy** Born to runaway slaves, **Elijah McCoy** worked for a railroad company where he designed a device that lubricated steam engines (he also invented the lawn sprinkler!). Engineers recognized the quality of his work and refused to accept substitutes, insisting on "the real McCoy."

41 **The Most Romantic Aviator** **Barbara Cartland** wrote 723 romance novels in her lifetime, selling billions of books, despite cheesy titles like *The Husband Hunters*. That's not her only accomplishment. Cartland invented a method of towing glider planes, allowing the engineless aircraft to fly long distances. The technology was used by militaries to transport troops.

40 **The Hardest-Working Doctor** If you had a headache in Middle Age Europe, apothecaries prescribed you mummy powder, which was exactly what it sounds like: ground-up Egyptian mummies. Not **Avicenna**. An all-around know-it-all, he penned nearly 450 works, including *The Canon of Medicine*, and was the first person to base medical treatment on something called "evidence."

39 **The Cosmic Early Adopter** If you follow theoretical astrophysics (who doesn't?), you know about the debate over the existence of a multiverse (that is: universes outside our own). The idea's not new. **Fakhr ad-Din ar-Razi**, a 12-century theologian and astronomer, was the first to write about "a multiverse beyond this known universe."

38 TO 22 **The Genius Jokesters** Writers for *The Simpsons* have slipped complex math jokes in scripts for years. Many have advanced math degrees, some even PhDs. **Jeff Westbrook** left a job at Yale to write for the show. In one episode, Homer nearly solved Fermat's Last Theorem, one of math's toughest puzzles.

taught her English, making Bridgman the first deaf-blind child to get an education—50 years before Helen Keller.

17. **Irène Joliot-Curie**
(1897-1956), FRANCE
Everybody knows about her mom, Marie. But people forget that Irène won a Nobel Prize for discovering artificial radioactivity. The Curies have won more Nobel Prizes than any other family—and they didn't even brag with a "My Daughter Won a Nobel Prize" bumper sticker.

16. **Laozi**
(604-531 BCE), CHINA
The founder of Taoism—a philosophy that, in a (very reductive) nutshell, embraces "keeping it real"—Laozi was rumored to have exited the womb as an old white-haired man stuffed with wisdom.

15. **Saint Augustine of Hippo**
(354-430), CHINA
In his younger days, the Christian theologian enjoyed sinning with the ladies, if you know what we mean. He'd pray: "Lord, make me chaste—but not yet." Hey, you have to respect the honesty.

14. **Valentina Tereshkova**
(1937-), RUSSIA
Despite having no

21 **The Most Storied Traveler**
She traveled the world twice, worked as a British spy, spoke fluent Persian, and taught herself Arabic surveying the Arabian Desert on camelback. As **Gertrude Bell** mapped Mesopotamia, she befriended tribal leaders, making her the perfect choice to draw the borders for a new country called Iraq.

20 **The Polymath's Hero** Jack of all trades, **Ziryab** popularized the tablecloth, improved methods for washing clothes, designed deodorant, invented the three-course meal and toothpaste, became a trendsetting hairstylist, introduced the lute to Europe, transformed the study of music theory, and started the world's first music conservatory.

19 **The Original Know-It-All**
A literal Renaissance man, **Athanasius Kircher** wrote 44 books on topics ranging from Egyptology to magnetism, was one of the first to suggest that germs caused the plague, once explored the crater of Mount Vesuvius—shortly after it erupted—and translated hieroglyphics. It turned out that most of his translation was pure gobbledygook, but hey, he tried.

18 **The Busiest Man Alive**
The CV of **F. Story Musgrave** puts the rest of ours to shame. He's a Marine, electrician, pilot, surgeon, mathematician, and professor of physiology and biophysics. He has seven graduate degrees, including an MBA and an MA in literature, is a parachutist with 100 experimental free falls, and is the only astronaut to have flown in all five space shuttles. Today, he's a palm farmer and concept artist at Disney.

ILLUSTRATION BY CARMEN SEGOVIA

piloting experience, Tereshkova was accepted into the Soviet space program because of her expertise in parachuting. In 1963, she became the first woman to go to space.

13. **The Man on the Moon**
THE MOON
Though to be fair, he may not be a man at all! In China, people see the "moon-toad." The Japanese swear it's a rabbit.

12. **Jagadish Chandra Bose**
(1858-1937), BANGLADESH
Thank this Bengali polymath, physicist, botanist, and writer for keeping your spider plant alive: He was the first to demonstrate that plants are sensitive to heat and light. In thanks, the International Astronomical Union named a crater on the moon after him.

11. **Mr. Rogers**
(1928-2003), USA
A music major in college, he wrote all of the songs on his show. And, in 1969, when the government was cutting the budget for public television, Mr. Rogers helped increase funding from $9 million to $22 million. It was a beautiful day in the neighborhood.

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THE RECORD FOR THE LONGEST MOTORCYCLE JUMP OFF A RAMP IS 425 FEET.

THE MENTAL FLOSS 50

Our Totally Impartial (OK,

NO. 10

Susannah Mushatt Jones

(1899-), USA

At 116, the Brooklyn resident is the human race's oldest living member, and she swears by eating four strips of bacon every morning. The phrase "Bacon makes everything better" still hangs in her kitchen today—a reminder that it's never too late to celebrate the power of little things.

NO. 9

Mary Kingsley

(1862-1900), ENGLAND

The mother of culture writing, Kingsley changed the genre by telling stories with empathy. She explored West Africa alone, fought crocodiles without shedding her stylish Victorian garb, and humanized those she met. Her work broke stereotypes about Victorian women and the people of Africa.

NO. 8

Shajar al-Durr

(C. 13TH C.), EGYPT

When France invaded Egypt in the mid-13th century, al-Durr, a widowed sultana, outwitted the superpower at every turn. She captured Louis IX, demanded nearly half of France's GDP for ransom, got it, and effectively ended the Seventh Crusade—truly, an original boss lady of foreign policy.

NO. 7

Kareem Abdul-Jabbar

(1947-), USA

The all-time NBA legend is also a legendary literature fiend. He's written 10 books. He avidly reads everything from John LeCarre to Miranda July. And: He's in *Airplane!* The bookish accomplishments of one of the coolest people in the world make Abdul-Jabbar an MVP in our book.

NO. 6

Judy Blume

(1938-), USA

She's the patron saint of young adult literature. Her characters dealt with racism, bullying, virginity, menstruation, and God—all in service of helping young readers roll with the punches of puberty. When the world made the least sense to us, Blume was there to shine some light.

ILLUSTRATION BY VIDHYA NAGARAJAN

a Little Bit Partial) Top 10

NO. 5

Adolphe Sax

(1814-1894), BELGIUM

Inventor of the sexiest (and ugliest) musical instruments of all time—from the unforgettable saxophone to the unforgivable sax-tuba—Sax is a model in never giving up. He gave us Lisa Simpson, John Coltrane, and basically all of romantic R&B, without which many of us wouldn't be here.

NO. 4

The Pet Rock

(1975-), USA

Between 1975 and 1976, more than a million were sold. Unassuming precursors to today's virtual pets, the rocks came with instructions on training your pet to do tricks. *(Stay! Good boy!)* Absurd? Of course. But they were also a lesson in how to see something worthy of love where others just saw ... a rock.

NO. 3

Elizabeth Jennings Graham

(1826-1901), USA

An entire century before Rosa Parks, Graham, an African American, stepped onto a horse-drawn streetcar in New York City. The conductor demanded she leave; Graham refused and was arrested. After she sued (and won!), NYC's public transportation was desegregated.

NO. 2

Sonia Manzano

(1950-), USA

Jim Henson might've been *Sesame Street*'s architect, but Maria—played by Manzano for 44 years—was its den mother, embodying its sunny, patient spirit. Fifteen-time Emmy winner Manzano retired this year, but her impact on the *Street*—and countless children's lives—won't be forgotten.

NO. 1

Edward Cave

(1691-1764), ENGLAND

In 1731, Cave published the first general-interest magazine: *The Gentleman's Magazine*. In an age of lousy yellow journalism, the punchy periodical featured stories about fire-eating as well as essays by a young upstart named Samuel Johnson. Where would magazines be without him?

RED NO. 40 ISN'T ACTUALLY RED UNTIL IT'S ATOMIZED AND DRIED. UP TO THAT POINT IT'S JUST A FEW GRAY POWDERS.
WE'VE BEEN TINTING FOOD SINCE 5000 BCE; THE "YELLOW NO. 5" OF THE 1300s CAME FROM SAFFRON AND MARIGOLDS.

SHELLAC, A SEALANT MADE FROM INSECT EXCRETIONS, IS USED ON EVERYTHING FROM VEGETABLES TO CHEWING GUM.

WE'VE KNOWN ABOUT COFFEE SINCE THE NINTH CENTURY, BUT ONLY STARTED MAKING CAFFEINE EXTRACT IN 1821.

READ THIS!

WE ARE WHAT WE EAT

A new book gives a colorful backstory to the nutrition label.

BY **PRIYANKA MATTOO**
PHOTOGRAPHY BY **DWIGHT ESCHLIMAN**

Reading an ingredient label isn't quite the same as meeting each component of your guilty pleasure—from the Blue No. 1 in Cool Ranch Doritos to the dehydrated onions in Campbell's Chunky Classic Chicken Noodle Soup—face to face. Enter *Ingredients: A Visual Exploration of 75 Additives & 25 Food Products*, a collaboration between photographer Dwight Eschliman and writer Steve Ettlinger.

The two dissect a range of processed foods and additives—from MorningStar sausage patties to shellac—walking the reader through unexpected tidbits about each item, like that most of the country's cornstarch production goes into making paper and cardboard. Whether or not you want them on your plate, these *Ingredients* prove a feast for the eyes and mind.

Ingredients: A Visual Exploration of 75 Additives & 25 Food Products, by Steve Ettlinger and Dwight Eschliman (Regan Arts, $35)

TO DO

3 SPORTS DOCS TO WATCH RIGHT NOW

1 THE SHORT GAME (2013)
An early start sets athletes on a path to greatness—Tiger Woods was swinging clubs before he was a year old, and Venus and Serena Williams's father tore the heads off their dolls to discourage non-tennis interests. But watching this film about eight kids on the road to the 2012 U.S. Kids World Golf Championships, you might wonder if it's worth it. The 7-year-olds (including Anna Kournikova's half brother) deal with intense pressure, at times acting more grown-up than the grown-ups around them.

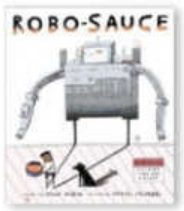
2 RUNNING ON THE SUN (2000)
Get inside the heads of the ultra-marathoners who compete in the Badwater 135, a 135-mile, nearly 15,000-foot climb that begins in Death Valley (280 feet below sea level, the lowest spot in North America) and ends near the peak of California's Mount Whitney (the highest point in the contiguous United States). Oh, and they do it at the height of summer. This film follows 13 runners as they try to beat the course record (currently just under 23 hours)—or just make it to the finish line in one piece.

3 THE KING OF KONG (2007)
Don't try to tell these guys that video games aren't a real sport. The heartbreaking, nail-biting tale of the rivalry between "Video Game Player of the Century" Billy Mitchell and perennial underdog Steve Wiebe is as tense as any sports epic, complete with shady officials and dirty tricks. Will Wiebe beat Mitchell's high score in *Donkey Kong* (which originally was designed to be a game featuring Popeye)? Or will Mitchell's influence take him out of the game like a strategically thrown barrel?

THE PAPER TRAIL

10 BOOKS PERFECT FOR GIFTING

BRAIN CANDY



Robo-Sauce
by Adam Rubin
(Dial Books, $19)

This story about the ultimate secret sauce—a condiment that transforms kids into robots—folds out into a full-on robot, which *Publishers Weekly* describes as "the best gatefold ever." Activate robo-domination!

Last Night's Reading
by Kate Gavino
(Zest Books, $25)

"A book is a very demanding love letter to someone," says Gary Shteyngart in this collection. Gavino's love letter to readers includes illustrated author portraits (Zadie Smith, Junot Díaz, Octavia Butler, and others) and memorable quotes.

Contraband Cocktails
by Paul Dickson
(Melville House, $20)

This drunk history traces modern imbibing from the appearance of the word *cocktail* in D.H. Lawrence's *Lady Chatterley's Lover* to the invention of the bloody mary. Plus, it comes with recipes for famous-author-approved drinks.

Slaughterhouse 90210
by Maris Kreizman
(Flatiron Books, $20)

Riffing off her hit blog, Kreizman pairs literature quotes with stills from TV and film, giving each medium a fresh treatment that's equally funny (Virginia Woolf plus *Friends*) and poignant (Sylvia Plath plus *Mad Men*).

Tales From Concrete Jungles
by David Lindo
(Bloomsbury, $27)

See urban spaces with new eyes through this collection of personal stories about city bird-watching. Bonus: Lindo critiques cosmopolitan birds in film (*Charlie's Angels* trumps *The Birds*, but not *Blade Runner*).

DEC. 17 NATIONAL MAPLE SYRUP DAY

HOT DATE!

North American squirrels will gouge the bark of maple trees with their front teeth to drink the sap. No pancakes required.

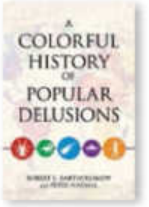
BRAIN KALE

Hunger Makes Me a Modern Girl
by Carrie Brownstein
(Riverhead, $28)

The Sleater-Kinney guitarist, *Portlandia* co-creator and star, animal shelter activist, and former *mental_ floss* cover model writes powerfully about navigating her multifaceted creative life in this memoir.

The Good News About What's Bad for You ...
by Jeff Wilser
(Flatiron Books, $20)

Love kale and standing desks? By all means, keep chewing and standing. If you don't, or want to know more, this is your guide. Bacon can be good for you; so can swearing. (Also: Don't apologize so much!)

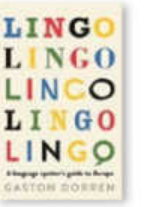


A Colorful History of Popular Delusions
by Robert E. Bartholomew and Peter Hassall
(Prometheus Books, $19)

What caused an itching epidemic in South African schools in 2000, or French nuns to meow for hours in the Middle Ages? The authors investigate "popular delusions" throughout history to explain.

First Bite
by Bee Wilson
(Basic Books, $28)

Wilson dives into the science and culture of food preferences and concludes that we *can* change our tastes. (If the teacher she mentions who lived on ketchup, Oreos, and instant noodles can do it, anyone can.)



Lingo
by Gaston Dorren
(Atlantic Monthly Press, $25)

Until the 1960s, it was rude to use *you* in Swedish conversation. Morsels like this dot Dorren's tour of 60 obscure European languages—like Romansh, the closest relative to Latin, still spoken by 35,000.

ISTOCK (GOLFBALL). ALAMY (SQUIRREL)

POP CULTURE SYLLABUS

OWLS

ARTSY CHARMERS

Artist Matt Sewell, a.k.a. the "Banksy of the Bird World," is on a mission to acquaint us with a few of the 216 known species of owls. His watercolors capture 50 different species of the mostly nocturnal bird, like the elf owl, which weighs 1 ounce and measures 5 inches, and Blakiston's fish owl, which catches fish up to three times its size.

READ *Owls: Our Most Charming Bird*, by Matt Sewell (Ten Speed Press, $13)

GUESS HOOT?

Created to commemorate the first Earth Day in 1970, Woodsy Owl almost wasn't an owl. When the U.S. Forest Service commissioned a team to create a character to teach kids about pollution and preservation, they also considered a raccoon, a ladybug, and a trout. The owl they chose remains one of two mascots protected by an act of Congress (the other is Smokey Bear). Passed in 1974, the Woodsy Owl Act protects Woodsy's signature Robin Hood–style hat and forest-green pants, as well as his catchphrase, "Give a Hoot, Don't Pollute." Use either without permission and you'll face up to six months in jail.

WATCH Woodsy Owl PSAs, USDA Forest Service's YouTube channel

NIGHT OF THE HUNTER

A symbol of wisdom starting with the Greek goddess Athena, owls are also fearsome carnivores. After gulping their catch whole, they regurgitate pellets of undigestible matter (bones, fur), which are big business for educational companies that sell the pellets to teachers for classroom dissection. See if you can spot any at this conservation center and avian medical clinic.

VISIT The Center for Birds of Prey, Awendaw, South Carolina

BIRD TROUBLE

Rain is more than an inconvenience to owls—it can incapacitate them. The ring of feathers surrounding each eye directs sound into their ears, and since their feathers aren't waterproof, their sense of hearing is dampened, which affects their ability to hunt. But that's just the bad news—this beautifully captured documentary is an uplifting look at the incredible physical capacities of owls.

WATCH *Owl Power*, PBS (on Netflix)

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ALAMY

The Quiz

BY **LUCAS ADAMS**

1 What was Kermit the Frog's cologne named?

⊏A⊐ Amphibia
⊏B⊐ A Tad of Tadpole
⊏C⊐ Mr. Ribbit
⊏D⊐ Eau de Toad

2 Civil War soldiers protected steamboats by covering them in _____.
⊏A⊐ Cotton
⊏B⊐ Pillows
⊏C⊐ Sandbags
⊏D⊐ Tar

3 Which is not a bone in your hand?
⊏A⊐ Trapezium
⊏B⊐ Scaphoid
⊏C⊐ Ulna
⊏D⊐ Capitate

4 Where was Otis Redding when he came up with the song "(Sittin' on) The Dock of the Bay"?
⊏A⊐ Sausalito, California
⊏B⊐ Baytown, Texas
⊏C⊐ Naples, Florida
⊏D⊐ Coney Island, New York

5 Which was not one of George Washington's dogs?
⊏A⊐ Sweetlips
⊏B⊐ Vulcan
⊏C⊐ Drunkard
⊏D⊐ Sugar Puck

6 Over the last 100 years, which name has been the most popular for girls in the United States?
⊏A⊐ Mary
⊏B⊐ Anne
⊏C⊐ Betty
⊏D⊐ Jennifer

7 What was Union general George B. McClellan's nickname?
⊏A⊐ Virginia Creeper
⊏B⊐ Lonesome George
⊏C⊐ Puddin'
⊏D⊐ Fightin' Philly

8 Birth control was first synthesized from what vegetable?
⊏A⊐ Tiger nut
⊏B⊐ Prairie turnip
⊏C⊐ Wild leek
⊏D⊐ Mexican yam

9 Which is not a state in Mexico?
⊏A⊐ Hidalgo
⊏B⊐ Chetumal
⊏C⊐ Sinaloa
⊏D⊐ Jalisco

10 Which writer is not buried at "Author's Ridge" at Sleepy Hollow Cemetery in Concord, Massachusetts?
⊏A⊐ Louisa May Alcott
⊏B⊐ Nathaniel Hawthorne
⊏C⊐ Herman Melville
⊏D⊐ Henry David Thoreau

11 Which insect has only one ear?
⊏A⊐ Cricket
⊏B⊐ Praying mantis
⊏C⊐ Earwig
⊏D⊐ Termite

12 In Alaska, a museum is dedicated to what tool?

⊏A⊐ Ice pick

⊏B⊐ Hammer

⊏C⊐ Screwdriver

⊏D⊐ Jackhammer

ANSWERS
1. A (The citrus perfume was sold exclusively at Bloomingdale's in 1995, marketed with the tag line "Pour homme, femme, et frog.")
2. A
3. C (The ulna is one of the two long bones along your forearm.)
4. A
5. D (Other pooches owned by Washington: Tartar, Ragman, Mopsey, and Madame Moose.)
6. A (Jennifer held the No. 1 spot from 1970 to 1984, however.)
7. A
8. D
9. B (Chetumal is a city in the state of Quintana Roo.)
10. C (He's buried at Woodlawn Cemetery in New York City.)
11. B
12. B

YOUR SCORE!

0–3 Pretty Good
4–6 The Best
7–9 The Worst
10–12 Also Pretty Good

1,006 WORDS

SPIDERS RECYCLE WEBS BY EATING THEM.

ALAMY

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Let's Go Places
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